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STATE OF OHIO
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DEPARTMENT OF NATURAL RESOURCES
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DIVISION OF GEOLOGICAL SURVEY
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Geol Survey

1994 REPORT ON OHIO MINERAL INDUSTRIES

WITH

DIRECTORIES OF REPORTING
COAL AND INDUSTRIAL MINERAL OPERATORS

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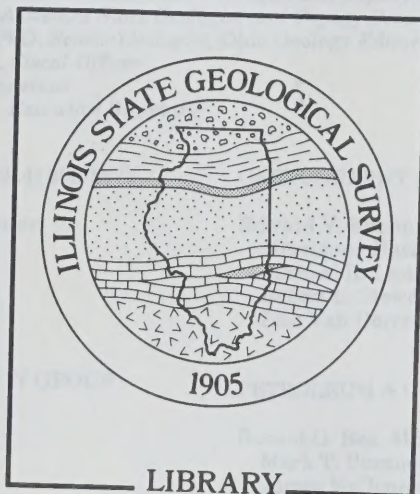
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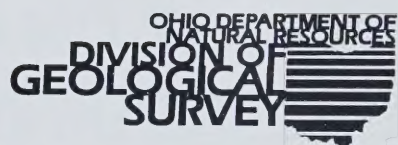
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Cover illustration: View of active mine and reclaimed area of Waterloo Coal Company in Jackson County. Phil Bowman (left), vice president and owner of Waterloo Coal Company, and Bill Parks (right), general mine superintendent and owner of Waterloo Coal Company, discuss their mine plan. Bowman and Parks are looking toward an active mining area (back cover). They are standing in an area that has been mined and reclaimed. In reclaiming the area, BYPRO, a natural byproduct of the paper-manufacturing process of Mead Paper Corporation in Chillicothe, was mixed with the topsoil. The BYPRO sludge is composed of cellulose (wood) fibers, clay, lime, nitrogen, and phosphorus. The cellulose and clay retard erosion of the soil caused by runoff and also stabilize steep slopes. The high lime content neutralizes acid present at coal-mine sites. The nitrogen and phosphorus are essential nutrients for developing and maintaining plant life. These inherent properties make BYPRO an excellent material for reclaiming surface-mined sites. The tall hay in the foreground, which includes timothy, orchard grass, alsike clover, red clover, and birdsfoot trefoil, has been grown on a mixture of BYPRO and topsoil. The hay field behind Bowman and Parks was grown on the same mixture and was recently cut to be used by a neighboring farmer.


Photo by Michael D. Williams. Information on BYPRO from Mead Paper Corporation, Chillicothe, Ohio.

PREFACE

Four years ago, federal and state government officials made efforts to assemble national and state energy policies. In developing those policies, it was (and still is) important to be bold enough to look as far into the future as possible, and confront the issue of national energy independence. At the same time, it was (and still is) critical to confront issues of environmental balance. We are a nation with an unthinkably voracious energy appetite; conservation and efficiency must be integral to any energy strategy. Although nuclear fusion may be our primary source of energy in about 50 years, fossil fuels will continue to be the backbone of our energy economy for the immediate future. Thus, our strategy must provide for investigations that identify the location, quantity, and quality of our vast coal resources. Furthermore, the strategy must give equal emphasis to clean-coal technologies that reduce deleterious atmospheric emissions and meet truly balanced and realistic environmental standards.

The challenge to identify, produce, and utilize Ohio's immense coal resources in an environmentally balanced way is enormous. Who will rise to meet the challenge? To a large degree, we should look to the mining community itself to exemplify the ingenuity, courage, and determination needed to confront today's energy circumstances. In his article titled "Ohio's coal miners," which accompanies this *Report on Ohio mineral industries*, Doug Crowell describes the spirit and perseverance of the men and women who have worked in Ohio's coal mines, some for decades longer than many people live. The miners and their families are the archetypes of true-grit Americans who can succeed against tremendous odds. Their fortitude in the face of great danger and geological difficulty is inspiring. Their example can kindle in us a new resolve to utilize Ohio's coal resources efficiently and safely for the economic and environmental security of many generations to come.

Thomas M. Berg
State Geologist and Chief



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FOREWORD

For the second year, we are promoting Ohio's mineral industries by having a color photo on the cover of the report. This year's cover photo wraps around on the back cover too. Our thanks to Waterloo Coal Company, especially Phil Bowman and Bill Parks, for their cooperation in making this cover possible.

The article in this year's report, "Ohio's coal miners," was written by Douglas L. Crowell, Survey Geologist and Supervisor of the Coal Geology Group (Doug is also my husband!). This article is a supplement to the recently released Bulletin 72, *History of the coal-mining industry in Ohio*.

The Survey has been successful in changing the Ohio Revised Code, Section 1505.10, so that coal and industrial-mineral reporting forms will be turned in annually instead of quarterly. This change will be effective in 1995. Therefore, companies will receive their annual reporting form(s) for the calendar year 1995 in December 1995.

All changes and/or additions proposed for this report are made to (1) increase the clarity and usefulness of the report to the public, and (2) simplify the operator's paperwork. Any comments on proposed changes or additions are welcome.

Sherry Weisgarber
Geologist and Mineral Statistician

Errata for
1993 report
now available
upon request

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OHIO'S COAL MINERS

by
Douglas L. Crowell,
Geologist Supervisor, Coal Geology Group,
Ohio Department of Natural Resources, Division of Geological Survey

Coal mining in Ohio has a rich and colorful history, spanning almost 200 years! At the heart of Ohio's coal-mining industry is the miner: the countless men, women, and children who have labored tirelessly in Ohio's coal mines. Ohio's early coal miners were an ethnically diverse group, yet united in purpose of work and commitment to each other. They, and other immigrants like them, built this country by their sweat and blood, strengthened by deeply held spiritual beliefs and family ties. They asked nothing from anyone except to be given an opportunity to work and build a future for themselves and their families. They represent the moral/ethical fiber that gave the United States its defining (albeit imperiled) character. As such, they are an inspiration to all Americans. During the zenith of mining coal in Ohio, they numbered more than 50,000 strong. Now, as a result of factors largely out of their control, they number about 4,000. Ohio's coal miners have included individuals whose ingenuity, courage, and hard-working nature are too often overlooked. To understand coal miners better, the experiences of several former Ohio coal miners are presented in the following paragraphs.

INGENUITY

First is Ray Stahl. A native of West Virginia, Stahl began working in coal mines at the age of 19. During World War II, Stahl served in the U.S. Air Force as an electrician. Stahl opened his coal mine, located near Port Washington, Tuscarawas County, in 1958. He worked the mine by himself for most of the 24 years that his mine was in operation. Stahl mined a 36-inch-thick seam of Middle Kittanning coal using equipment, including an electric locomotive, that he had built. Apparently there was nothing electrical he couldn't fix or create. Stahl mined coal during the spring and summer months and did factory work during the fall and winter months to provide the income to purchase his mining supplies. A rugged and self-reliant individual, he preferred coal-mine work. It is difficult to imagine what satisfaction could be derived from shovelling several tons of coal each day, as Stahl did, from a kneeling position in a tunnel 36 inches tall; the only light to be seen comes from your miner's lamp, and the only noise you hear is your own voice or the creaking and groaning of the pillars of coal surrounding you as they bear the weight of many tons of overlying rock! This was Stahl's office; there were no overhead lights, no windows, no heat, no running water, no pictures hanging on the walls, no office furniture.

William Leaver (see photo) of Shawnee, Ohio, is another example of self-reliance and resourcefulness by an Ohio coal miner. Leaver mined coal from the basement of his home for at least 17 years. When he put in a basement under his home, Leaver learned his home was built on top of seam of coal 14 feet thick. Seizing the opportunity, Leaver developed an entry into the coal seam in the north wall of his basement. Whenever he needed coal to fire his



William Leaver, of Shawnee, Ohio, wheeling a load of coal from his basement coal mine. Photo from United Mine Workers Journal, 1935, v. 46, no. 18, p. 9.

furnace, he simply went into his mine and dug out his supply (United Mine Workers Journal, 1935, v. 46, no. 18, p. 9).

James E. Tracy of Pomeroy, Ohio, born in 1871, started working in a coal mine at the age of 12. Using his creativity and 59 years of experience as a coal miner, Tracy designed ways to improve mechanized mining and at the age of 71 patented a coal-cutting machine. The Tracy coal cutter was lighter, easier to operate, and more capable of operation in any direction than conventional coal cutters of 1942 (United Mine Workers Journal, 1942, v. 53, no. 16, p. 17).

Owen Bailey (see photo) operated a small coal mine at Rehoboth, near New Lexington, Ohio. Animals such as horses, ponies, mules, and dogs were commonly used as beasts of burden in Ohio coal mines. But, by the 1930's, most mine animals had been replaced by machinery and electric power. However, during the early 1940's, Bailey found a goat to be a suitable source of power for his coal-mining needs (United Mine Workers Journal, 1941, v. 52, no. 7, p. 16).

COURAGE

Ida Mae Stull (see photo) was one of Ohio's women coal miners. She was born in 1896, one of 18 children of a poor coal-mining man. At the age of 6, Ms. Stull began working in a coal mine by carrying a lantern for her father as he wheeled coal from the mine. *It wasn't long until Ms. Stull, like many miners, came to regard the coal mine "like a second home."* She later jokingly stated that maybe her



Owen Bailey and his mine goat "Billie" at the entrance to Bailey's coal mine at Rehoboth near New Lexington, Ohio. Billie weighed 200 pounds and could haul a mine car loaded with 1,600 pounds of coal. Bailey said of his goat, *He doesn't like too many strangers around, especially if he is tired. Then, too, his long horns hit the roof, ever so often, and as long as they give a clear ring I know there are no loose rock.* Photo and caption quote from United Mine Workers Journal, 1941, v. 52, no. 7, p. 16.

attraction to the mine was a result of having been born on Groundhog Day and that's why she preferred to be underground (United Miner Workers Journal, 1982, v. 93, no. 2, p. 12). Ms. Stull gained some fame in 1934 because, while mining coal from the Megan mine, near Cadiz, she was prohibited from mining coal by James Berry, Chief of the Ohio Division of Mines. This action was based on an old Ohio law that forbade women from being coal miners, taxi drivers, or having other dangerous occupations. Following an appeal by Ms. Stull to Governor George White, she was allowed to return to mining coal. Ohio's Attorney General John Bricker determined that women may work in coal mines in Ohio—provided they owned the mine. In the case of Ms. Stull, she was part owner of the mine in which she worked. Ms. Stull was not unique. Other women worked in coal mines during the Depression. What made Ms. Stull unusual was that she was willing to fight for her right to dig coal. A high-spirited woman, even at the age of 81, she is quoted as saying, *It may sound unladylike, but every woman to her own desires, and mine is digging coal. I don't like housekeeping. A pick handle feels better than a broom handle to me . . . my face gets black but I prefer coal dust to a powder puff . . . I could dig coal faster and better than any man alive* (United Mine Workers Journal, 1982, v. 93, no. 2, p. 12).

Because of her unwavering perseverance and courage, Ms. Stull paved the way for other women to work in Ohio coal mines, such as Linda Guisinger and Sandy Sines, who, in 1974, started to work at Southern Ohio Coal Company's Meigs No. 2 mine in Meigs County (United Mine Workers Journal, 1974, v. 85, no. 15, p. 4). Twenty-one years later, Ms. Sines is still mining coal at the Meigs No. 2 mine (Melissa Willard, American Electric Power Company, personal communication, 1995).

James Faunda, a coal miner with the Hanna Coal Company, was awarded a Certificate of Honor from the U.S. Bureau of Mines for saving the life, by controlling arterial bleeding, of a fellow miner whose right foot was severely cut by a coal-cutting machine. Faunda was a first-aid team



Ida Mae Stull. Photo from United Mine Workers Journal, 1982, v. 93, no. 2, p. 12.

member at the Glen Castle No. 6 mine, at Harrisville, in Harrison County. He demonstrated how invaluable first-aid training is. His training and courage sustained him during the 45 minutes it took to free his fellow miner from the coal-cutting machine.

CHILDREN

Children commonly worked in and around coal mines as a matter of tradition to learn the trade and skills of mining through apprenticeship with their fathers. Some children worked in coal mines to help support the family. Children commonly were employed by coal operators because they provided cheap labor, especially for less physically demanding jobs such as trapper boys and mule drivers (see photo). Trapper boys were responsible for opening and closing ventilation doors in underground haulageways to allow coal cars to pass. *The trapper boy's employment is his first dreary apprenticeship in the coal mine. If he can bear that he is not likely to be timid afterwards. There he sits for hours in the dark. He must not stir from his post, for fear of being lost* (United Mine Workers Journal, 1939, v. 50, no. 22, p. 19). Children also worked at picking tables, where the waste material was separated from the coal by hand. The treatment of children and the conditions in which they worked in the mining of coal frequently were deplorable. Although Ohio's Mine Law of 1874 prohibited children under the age of 16 from working in coal mines, many children, as evidenced by the many experiences related herein, did work as apprentice miners alongside their fathers in Ohio coal mines, even into the early 1900's.

John Corven of Saltillo, Ohio, was born June 5, 1852, and started to work in a coal mine before he was 7 years old. At the age of 68, Corven was still able to pick-mine 7 tons of coal per day (United Mine Workers Journal, 1921, v. 32, no.



Charles Rensi, then 18, with brothers Frank (left) and Anthony (center). The two older brothers made \$2.10 a day as mule drivers. Charles Rensi worked 52 years as a miner. Photo circa 1907, from United Mine Workers Journal, 1953, v. 64, no. 8, p. 13.

2, p. 10).

Andrew Roy, born in Lanarkshire, Scotland, in 1834, started to work in the coal mines of Scotland at the age of 8. His family emigrated to the United States in 1850, where he continued to work in coal mines. His involvement in coal mining and keen interest in mine safety led Roy to become Ohio's first State Inspector of Mines in 1874.

Evan Morgan was born March 6, 1858, in Boyd County, Kentucky, and began working in coal mines at the age of 8, carrying picks and other tools. At the age of 14, he started loading coal. By 1885 he moved to the Hocking Valley area, where he continued to mine coal. He was the father of three sons and four daughters. He is credited with never having used tobacco or strong drink in his life (United Mine Workers Journal, 1937, v. 48, no. 24, p. 16).

Enoch Wooten of Cambridge, Ohio, was born at West Bramwich, England, June 17, 1845, and started working in a coal mine in April 1855, when he was only 9 years old. Speaking about his experience as a miner, Wooten stated, *I worked 12 hours a day and received one shilling, which equals 24 cents . . . I am employed as trapper at the present time, My age is 75 and my time in the mines is 65 years and 7 months. I am employed by the Cambridge Collieries Company, Trail Run No. 2 mine* (United Mine Workers Journal, 1920, v. 31, no. 24, p. 9; and 1921, v. 32, no. 1, p. 9, 10).

John S. Wilson of New Straitsville, Ohio, was born in England in 1868, emigrated to Ohio at an early age, and started working in a coal mine at the age of 12. Wilson was a coal miner for about 41 years, after which he served as town clerk of New Straitsville for 25 years before retiring. He was also one of 40 delegates from Ohio representing the National Trades Assembly 135 Knights of Labor, who met with delegates of the National Progressive Union at Columbus, Ohio, in 1890 to form the United Mine Workers of America (UMWA) (United Mine Workers Journal, 1949, v. 60, no. 1, p. 7; and 1950, v. 61, no. 8, p. 6).

Another John Wilson from New Straitsville was a long-time coal miner. This John Wilson, as a result of loosing a leg at the age of 5, went by the nickname of "Peggy." In spite of his handicap, "Peggy" started work in a nearby mine at the age of 11. By 1937, he was working at the

Sunday Creek No. 6 mine at Millfield, Ohio (site of Ohio's worst coal-mine disaster in 1930). He was a member of the Knights of Labor until it dissolved in 1890, then became a member of the UMWA (United Mine Workers Journal, 1937, v. 48, no. 4, p. 22).

Born in Scotland in 1847, S. D. Hanna of Jobs, Ohio, said of his mining experience: *I . . . entered the mines in 1859. Have been working in and around the mines ever since, making 61 years in all, and am still working every day in the mine. I am also clerk and treasurer of the Board of Education and I receive \$450 per year for attending to these duties. I don't lose any time in the mine over it* (United Mines Workers Journal, 1921, v. 32, no. 2, p. 10).

Ambrose Jenkins was born in 1874 at McArthur, Ohio, and started working as a trapper boy at the age of 14 at 25 cents per day. After 43 years as a miner, Jenkins was injured by a roof fall in 1931, which left him crippled and unable to work (United Mine Workers Journal, 1933, v. 44, no. 10, p. 7).

VETERAN MINERS

It is not uncommon for an individual to work 25 or 30 years at a particular job by the time of retirement. Retiring after 50 years is much less common. In a physically demanding occupation such as coal mining, working 50 years is quite an achievement. However, to exceed or even greatly exceed 50 years as a coal miner, as most of the individuals included in the accompanying table have, is an extraordinary achievement. To achieve such records of employment, many of Ohio's veteran coal miners began working in coal mines as children and remained loyal to their profession throughout their life.

Among Ohio's veteran coal miners was William Barcus of Rush Run, Ohio. He was born in 1850 and worked 49 years as a coal miner. One of the mines Barcus worked in was the Kelly mine north of Rayland, Ohio. By 1939, Barcus' family included six boys and five girls, 68 grandchildren, 85 great-grandchildren, and one great-great-grandchild. Speaking on the mining conditions, Barcus stated, *The men seldom saw daylight except on Sundays and to go the company store on pay day and settle up the grocery account. If you had any money coming the company would give you a due bill but paid out no money* (United Mine Workers Journal, 1939, v. 50, no. 17, p. 22; and 1940, v. 51, no. 3, p. 10).

John O. Martin worked 50 years, without serious injury, as a miner for the Globe Iron Company at Jackson, Ohio. In 1875, at the age of 24, Martin started mining coal at the old Globe slope mine, which was abandoned in 1889. He also mined coal at the Huron No. 1 mine, abandoned in 1896, and the Huron No. 2 mine, abandoned in 1907 (United Mine Workers Journal, 1926, v. 37, no. 13, p. 17).

J. A. Gaskins mined coal for 53 years near Powhatan Point, Ohio. In 1879, at the age of 14, Gaskins began working in a mine that supplied coal to a grist mill, which used about 1 ton per day, and to 30 neighboring families. By mining coal, Gaskins was able to earn about \$1.50 per day at a wage rate of 75 cents per ton.

Spencer Bennett of Bethesda, Ohio, was born January 31, 1875, at Jackson, Ohio, and started to work in a nearby coal mine at the age of 11. Bennett worked 58 years as a coal miner before retiring. Besides the seven daughters and three sons of his own, Bennett adopted four boys and one

VETERAN COAL MINERS OF OHIO

<u>Years of service</u>	<u>Name</u>	<u>Home</u>
80	Issac Six	Nelsonville
79	Harry Carroll	Wolf Run
72	Joe Hawk	Carbondale
72	John Murgatroyd	Cambridge
70	Thomas Taylor	Straitsville
70	P. F. Loper	Murray City
69	George B. Ledger	Roswell
68	Thomas Parker, Sr.	Minersville
67	W. B. James	Minersville
67	Thomas J. Davis	New Straitsville
67	Thomas Jones	Syracuse
67	David Mathews	Syracuse
66	Thomas Haines	Flushing
65	George Ruble	Adena
65	Enoch Wooten	Cambridge
64	Joseph Harris	San Toy
64	Robert Sharp	The Plains
63	John Hayden	Glouster
63	Oliver Hoskins	Nelsonville
63	George Meinhart	Chauncey
63	Wright Ransden	Mineral City
62	James H. Jones	Butchel
61	Charles H. Best	Byesville
61	John Corven	Saltillo
61	G. W. Jewitt	Trimble
61	F. B. Jones	Coalton
61	S. D. Hanna	Jobs
60	Thomas Spencer	Nelsonville
60	Henry W. Jack	Adena
60	George W. Dow	Coalton
60	William Caygill	Cambridge
60	James Atkinson	Washingtonville
59	Aug. Veigel	Urichsville
59	James E. Tracy	Pomeroys
58	Spencer Bennett	Bethesda
58	John O. Loper	McArthur
58	John Cook	Crooksville
57	H. T. Oliver	Chauncey
55	Evan Morgan	The Plains
55	Robert Grim	Canaanville
54	John McDougall	Mineral City
53	J. A. Gaskins	Powhatan Point
53	J. "Peggy" Wilson	New Straitsville
52	Charles Rensi	Piney Fork
52	R. B. Lovejoy	Neffs
51	Frank Vandersommen	Bridgeport
51	John Kurth	St. Clairsville
50	John O. Martin	Jackson
49	William Barcus	Rush Run
49	Everett Nunley	Byesville

girl from the county children's home at Tacoma. In addition to being a coal miner, he ran his own farm and worked on nearby farms (United Mine Workers Journal, 1951, v. 62, no. 15, p. 13).

John O. Loper of McArthur, Ohio, was born November 19, 1878, and started work in 1891 for the Sunday Creek Coal Company as a trapper boy and car greaser. In addition to these tasks, he also helped his father bail water for 75 cents per 9-hour day. During his 58-year career as a coal miner, he worked for Lurig Coal Company (1901-1906), Sunday Creek Coal Company (1906-1917), New York Coal Company (1918-1944), and Stalter Brothers Coal Company (1944-1949).

Thomas Parker, Sr., of Minersville, Ohio, was born in South Wales in 1843 and worked 68 years as a coal miner. Relating his experience as a coal miner, Parker stated, *My first work in the mines was trapping, when I was 9 years old in Wales, at a wage of sixpence (12 cents) per day . . . I came to America with my parents in 1858. I was hurt in a fall of slate [shale] in August, 1920, and I hardly think I will ever be able to enter a mine again, but it hurts me to think that I may have to give up my work as a miner, as I dearly love it* (United Mine Workers Journal, 1921, v. 32, no. 2, p. 9, 10).

P. F. Loper of Murray City, Ohio, started working in a coal mine on June 1, 1870, and worked 70 years as a coal miner. Commenting on his mining experience, Loper stated, *I have seen many changes in the course of my years, and have lived on the rough side of the world all my life. I went into the mine at the age of 9 years and by the time I was 15 I was doing a man's work. I did not go to school but very little but my parents taught me to be honest and fair in all my dealings . . . I have tried to be fair to my associates. I have never sought popularity or notoriety . . . I cannot work any more and have the miner's asthma* (United Mine Workers Journal, 1940, v. 51, p. 19).

Thomas Taylor of Straitsville, Ohio, was born in Durham County, England, in February 1840 and started to work in a coal mine in August 1850. Concerning his experience as a coal miner, Taylor stated, *At that time the mine used to start to hoist coal at 4 o'clock a.m., and quitting time was 6 o'clock p.m., for men at the top of the pit. Trappers and day laborers would get home in the evening about 7 or 8 o'clock. Boys have a better time now compared with those early days. I have been in and around mines for 70 years* (United Mine Workers Journal, 1921, v. 32, no. 1, p. 8).

Joe Hawk of Carbondale, Ohio, was born in 1860 and started to work in coal mines at the age of 10. Hawk continued to mine coal for 72 years (United Mine Workers Journal, 1944, v. 55, no. 1, p. 22).

Harry Carroll (see photo) of Wolf Run, Ohio, was born on St. Patrick's Day in 1848 at Lancashire, England. In 1858, at the age of 10, Carroll began working in a coal mine as a trapper boy. He later worked as a mule driver and spent at least 52 years loading coal. Carroll was awarded a Certificate of Honor by the Joseph A. Holmes Safety Association in recognition of 79 years of accident-free work as a coal miner. It is estimated that Carroll loaded nearly 100,000 tons of coal, by hand. By his 94th year, Carroll had eight children, 30 grandchildren, and four great-grandchildren (United Mine Workers Journal, 1941, v. 52, no. 15, p. 16).

Issac ("Ike") Six (see photo) of Nelsonville, Ohio, was born January 4, 1848, and in 1861, at the age of 13, began working at the Old Floodwood mine. This mine, located about 4 miles southeast of Nelsonville, was the first rail-



Harry Carroll, a veteran Ohio coal miner of 79 years, and his wife. Photo from United Mine Workers Journal, 1941, v. 52, no. 15, p. 16.

road mine in the Hocking Valley–Sunday Creek Valley. Six helped to open the old Stenrod mine located south of Nelsonville. He also worked at the Kimberly mine, located about 2 miles southeast of Nelsonville. Six worked during a time when a pick was the coal miner's chief tool, shot holes were driven by a churn drill, and miners were paid \$1.25 per 10-hour day for hauling coal (United Mine Workers Journal, 1937, v. 48, no. 12, p. 9; 1941, v. 52, no. 15, p. 20; and 1948, v. 59, no. 4, p. 10).

The following account by Glen Farley (United Mine Workers Journal, 1972, v. 83, no. 2, p. 24, 25) perhaps typifies best the experiences and feelings shared by many Ohio coal miners:

I have often been asked why I spent most of my life working underground. My answer is usually the popular one, "well-l-l, now that's a good question." But I suppose if I were to give the reasons I was a coal miner, I would come up with the same that anyone would who spent his life in a certain job, whether he was a farmer, a dentist, a carpenter, a lawyer, or a worker in almost any occupation you can think of: you find out you're good in a line of work; you stay with it, and you have a certain sense of satisfaction in what you are doing.

Coal mining has not always provided good and safe conditions under which a man could make his living. In the 19th century mining was about the hardest kind of work, performed under the most dangerous conditions, and it paid the poorest wages. Mining had about the lowest position on the industrial scale. But, . . . during the early 1900's mining began to be recognized for the important industry it was.

Because of the location of mines, miners in the early years lived near the mines in compact communities, closely knit, in a solidarity seldom seen in any other industry. Possibly because of location, hazards of their work, discomfort, and



Three veteran Ohio coal miners: left to right, Oliver Hoskins, Issac Six, and Thomas Spencer. Spencer worked about 60 years as a coal miner. Hoskins dug, hauled, and dumped coal for 63 years. Six labored 80 years in Ohio coal mines. Photo from United Mine Workers Journal, 1941, v. 52, no. 15, p. 20.

their common interests, a spirit of independence and comradeship developed among them. Then, and I expect there still is, there was a father-to-son hereditary relationship, strong in many mining communities.

Both my father and my brother were miners. It was not unusual in a large family of eight or ten children for the boys, as soon as they were physically able, to go into the mines with their father, who taught them the trade. It seemed to be a kind of graduation to manhood. Sometimes young boys of 12, 13, or 14 went into the mines as drivers of ponies or mules that pulled cars up the long slope to the tipple. Of course, these youngsters were put to work for economic reasons. We can be thankful today that we have laws regulating the age when youngsters can work.

I was 17 when I began working in the mine. As I look back, I think surely that boy must have been another who was working on a distant planet. He could not have been Glen Farley. And I wonder how this boy, or even any grown man, in those days could have endured the hardships which went with his job.

On my first job I worked with my father in a mine three miles from our home . . . So we had to walk three to four miles to get to work, carrying equipment, shovels, picks, augers, dynamite, and, of course, our lunch pails. The good miner planned to get into the tunnel as much before 7:00 a.m. as he could. He began immediately to piling his coal up to have it ready at 7:00 a.m. when the first cars were rolled down the narrow-gauge tracks. We worked what we called "tonnage," meaning we were paid by the ton . . . Tonnage was added up every two weeks, and then he was paid his wages.

A miner's day usually was eight hours, but frequently nine, for six days a week. These hours did not include the long walk from home to the mine or the long return walk after work. Mining wasn't just standing up, picking away at a coal seam. Sometimes it meant lying on your stomach in the tunnel, not being able to raise up more than about a yard, hacking away, with the only light from the lantern on your hat. In those early days this carbide lantern gave the only light in the mine. Later lights on miner's hats were improved

by use of batteries, and mines were lighted electrically.

Hazards were numerous, and I wonder that there were not many more tragedies. There was no fan system, causing very poor ventilation. Breathing was difficult. A mine inspector would come through on test walks, holding high a safety lamp, watching to see if it was using oxygen. Fire damp was a bad condition, as was the ever-present coal dust. Of course, we always had to be alerted concerning the presence of any inflammable gas.

Since I have come "above ground" after about a half century of being underground, I can say that I have not had much difficulty making an adjustment to a new way of life.

One needs to find new things to take the place of the old. I never had time to enjoy nature. Now I love walking in the woods and gardening.

These are just a few examples of the countless men, women, and even children, who worked in Ohio coal mines. This group of individuals is typical of Ohio coal miners, many of whom worked lifelong at mining coal, some of whom lost their lives in the pursuit of their profession, and all whose hard work, determination, dedication, and ingenuity have resulted in a higher standard of living shared by all Ohioans.

To read more about the coal miners and mining industry in Ohio, see the newest bulletin published by the Division of Geological Survey:

Bulletin 72, *History of the coal-mining industry in Ohio*, by Douglas L. Crowell, 1995. 204 p., 186 photographs, 9 maps, 27 line drawings.

This bulletin is available in many public libraries in Ohio or may be purchased from the Division of Geological Survey for \$12.00 plus \$0.69 Ohio sales tax and \$2.00 shipping and handling. Credit-card orders may be placed by calling 614-265-6576.

1994 OHIO MINING ACTIVITIES IN BRIEF

Reports were filed in 1994 for 275 coal-mining operations, including 6 mines with their own coal-washing facility. Coal production was reported from 192 of these 275 operations. Reports also were filed for 57 separate coal-washing plants and associated facilities. Of 678 industrial-

mineral-mining operations known to be operating in 1994, 542 operations were active. A total of 47 mines reported production of multiple mineral commodities. Of this total, 24 mines reported production of multiple industrial minerals; 16 mines reported production of multiple industrial minerals and coal; and 7 mines reported production of coal and one industrial mineral. There were 660 new wells completed for oil and gas in 1994, of which 510 were productive and 150 were dry.

The total value¹ of coal was \$767,014,211 in 1994; the value of oil and gas was \$453,987,756; and the total value¹ of all nonfuel industrial minerals was \$594,980,800 in 1994.

¹Includes reported and estimated values. Some operations reporting sales did not report a value for those sales. A countywide- or statewide-average price per ton was calculated for each industrial mineral commodity based on sales for which the value was reported. A countywide average price per ton was calculated for coal based on sales for which the value was reported and method of production. These calculated averages were used to estimate the value of the sales for which the actual values were not reported.

TABLE 1.—1994 Minerals sales and production in Ohio

Commodity	Sales ¹	Production ²	Value ³
Coal	28,683,981 tons	28,598,415 tons	\$767,014,211
Limestone and dolomite	63,169,439 tons	62,415,343 tons	\$276,119,905
Sand and gravel	51,573,324 tons	51,299,688 tons	\$191,699,824
Salt	4,445,918 tons	4,324,976 tons	\$75,109,758
Sandstone and conglomerate	1,819,421 tons	2,015,612 tons	\$32,773,396
Clay	1,835,690 tons	1,880,540 tons	\$8,643,483
Shale	3,135,729 tons	3,135,734 tons	\$8,123,123
Gypsum	259,105 tons	259,105 tons	\$2,461,499
Peat	7,035 tons	9,446 tons	\$49,812
Gas	4	130,855,248 MCF ⁵	\$317,728,937
Oil	4	8,757,872 barrels	\$136,258,819

¹Includes material for captive use.

²The production figures for the industrial minerals are estimates. Many operators do not know actual production. Some operators report estimates, other operators do not report any production. For those operators who do not report production, production is assumed to equal sales.

³The FOB value of industrial minerals sold was estimated for those mines which failed to report this information and for those producing material for captive use. These estimates were calculated using a countywide- or statewide-average price per ton calculated on reported FOB values.

⁴Figure not available.

⁵Thousand cubic feet.

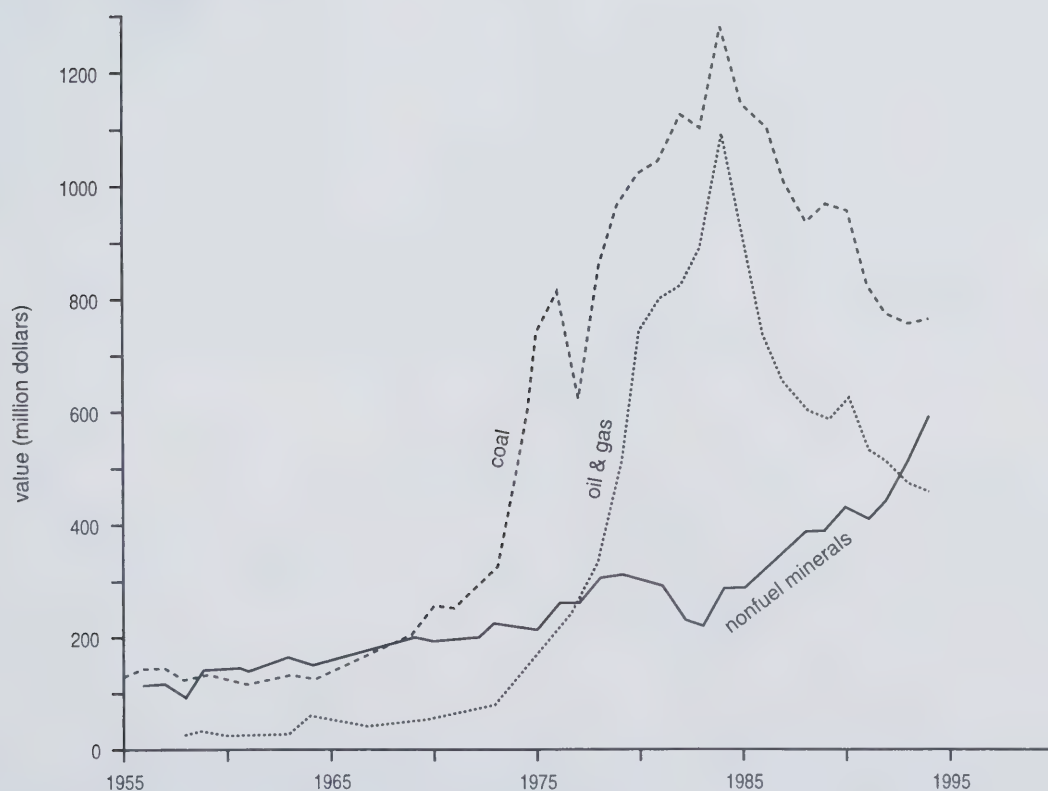


FIGURE 1.—Value of coal, nonfuel minerals, and oil and gas in Ohio.

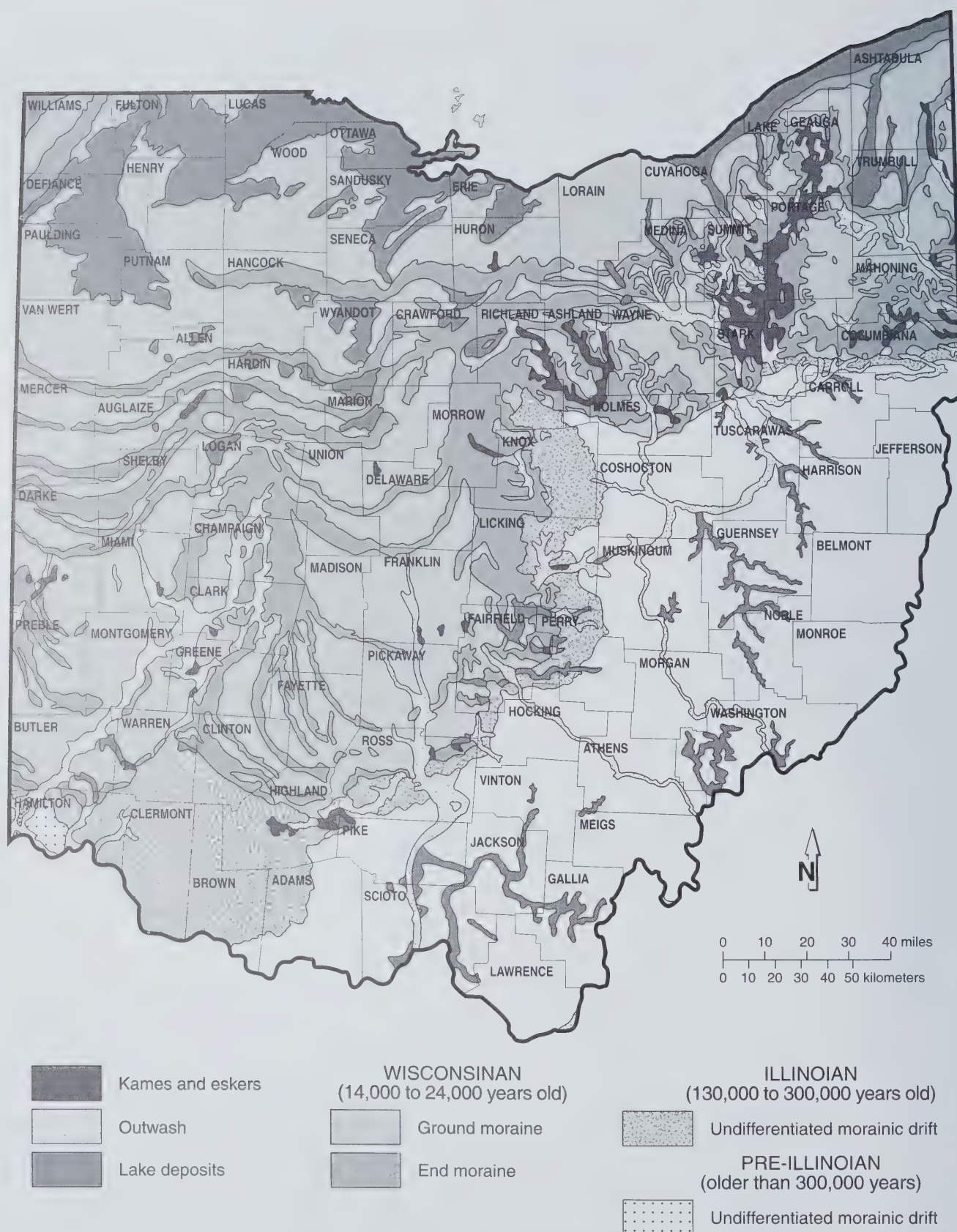
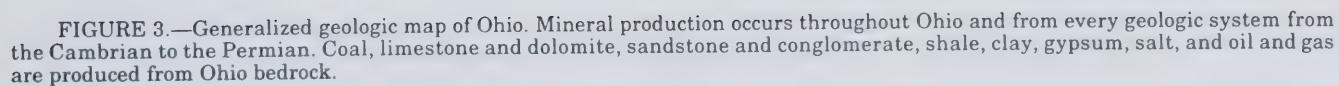


FIGURE 2.—Generalized map of the glacial deposits of Ohio. Continental glaciers advanced over the Ohio landscape several times during the Ice Age. These glaciers deposited unconsolidated materials on top of the bedrock over nearly two-thirds of the state. Most of Ohio's sand and gravel production comes from kames, eskers, and outwash, which were deposited by meltwater from the glaciers. Other glacially derived industrial minerals in Ohio include peat and clay.



COAL

Coal was produced by 74 companies at 192 mines in 22 Ohio counties during 1994. Production increased 3.7 percent from 1993, totalling 28,598,415 tons in 1994; 14,983,978 tons (52.4 percent of total production) were produced at 182 surface mines, and 13,614,437 tons (47.6 percent of total production) were produced at 10 underground mines. Of 26 coal-producing states, Ohio ranked 11th in 1994. The top five states, in descending order of production, are Wyoming (236.1 million tons), West Virginia (161.5 million tons), Kentucky (160.6 million tons), Pennsylvania (62.2 million tons), and Illinois (53.0 million tons). These five states produced 65.3 percent of the nation's coal in 1994. Ohio produced 2.8 percent of the nation's coal in 1994. The top five coal-consuming states, in descending order of consumption, are Texas, Indiana, Ohio, Pennsylvania, and Illinois. These five states used 32.7 percent of the total coal consumed by all 50 states in 1994.²

In comparison to 1993, there were 3 fewer mines reporting production of 50,000 tons or less, 3 more mines producing between 50,000 and 500,000 tons, 1 more mine producing between 500,000 and 1,000,000 tons, and 1 fewer mine reporting production of 1,000,000 tons or greater; there was no net change in the number of mines in 1994.

The five leading counties for 1994 production were Belmont, Meigs, Monroe, Vinton, and Harrison Counties; these counties produced 62.4 percent of the 1994 total production. A total of 28,683,981 tons of coal were sold in 1994; total value³ was \$767,014,211. The average price per ton of all

coal sold was \$26.74; surface-mined coal averaged \$23.09 per ton and underground-mined coal averaged \$30.88.

In underground mining, 28.2 percent of the coal was mined by continuous miner and 71.8 percent was produced by longwall mining; no coal was produced by conventional mining in 1994. In surface operations, 8.3 percent of the coal produced was auger mined, and 91.7 percent was surface mined.

The Pittsburgh (No. 8) coal was the most heavily mined seam, followed by the Clarion (No. 4A), Meigs Creek (No. 9), Middle Kittanning (No. 6), and Lower Kittanning (No. 5) seams. Coal produced from these five seams constituted 81.9 percent of the total 1994 production.

A total of 19,457,369 tons of washed coal were reported in 1994. Reports from 14 coal-washing plants indicate an average 33.2 percent loss in washing.

Trucking was the primary means of coal disposition, carrying 50.9 percent of the total sales. Conveyor belts carried 19.6 percent, water transport carried 16.3 percent, and rail transported 13.2 percent of the coal sold in 1994. A total of 3.7 percent of the coal produced was reported as stored.

The total average annual employment reported in 1994 was 4,049 employees; 2,399 of these were production employees. Production employees worked an average of 156 days producing coal in 1994. The average annual wage earned by all production employees was \$39,233, based on those employees for whom wages were reported. The average annual wage for surface-mine production employees was \$31,303, and the average annual wage for underground-mine production employees was \$49,846. Wages earned by all employees totalled \$166,418,155 in 1994.

²Preliminary information from U.S. Department of Energy, Energy Information Administration.

³Includes reported and estimated values. See footnote 1, p. 7.

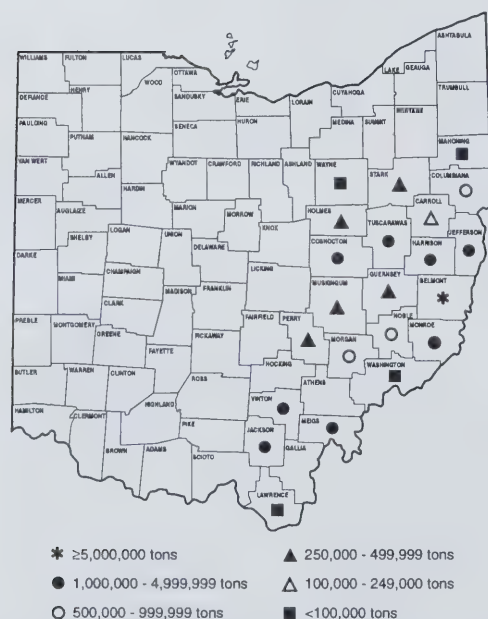


FIGURE 4.—Coal production in Ohio in 1994, by county.

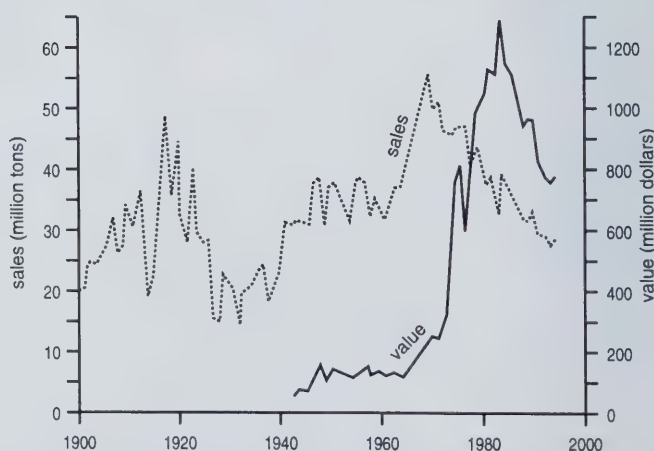


FIGURE 5.—Sales and value of coal in Ohio.

TABLE 2. — 1994 Ohio coal production by production-size group and change from 1993

Production-size group	1994		Change from 1993 (short tons)
	Number of mines reporting	Production (short tons)	
Under 25,000 tons	75	721,824	- 44,595
25,000 to 49,999 tons	33	1,285,252	+ 337,007
50,000 to 99,999 tons	37	2,653,328	+ 392,959
100,000 to 249,999 tons	30	4,962,208	+ 554,114
250,000 to 499,999 tons	8	2,710,347	- 1,811,964
500,000 to 999,999 tons	4	2,963,168	+ 768,213
1,000,000 tons and over	5	13,302,288	+ 817,106
TOTAL	192	28,598,415	+ 1,012,840

TABLE 3. — 1994 Ohio coal production by county and mining method

County ¹	All methods (short tons)	Total number of mines	Underground					Surface			
			Number of underground mines reporting	Production (short tons)				Number of surface mines reporting	Production (short tons)		
				Total underground	Longwall	Conventional	Continuous miner		Total surface	Strip	Auger
Belmont	6,319,728	28 ²	1	4,531,093	3,494,746		1,036,347	27 ²	1,788,635	1,460,499	328,136
Carroll	142,868	2 ²						2 ²	142,868	142,868	
Columbiana	811,171	18	4	305,627			305,627	14	505,544	471,863	33,681
Coshocton	1,149,558	11						11	1,149,558	1,116,278	33,280
Guernsey	303,132	9						9	303,132	214,870	88,262
Harrison	2,521,449	15	1	965,232			965,232	14	1,556,217	1,232,577	323,640
Holmes	313,057	6						6	313,057	313,057	
Jackson	1,475,426	9 ²						9 ²	1,475,426	1,475,426	
Jefferson	1,325,113	20	1	359,993			359,993	19	965,120	905,109	60,011
Lawrence	18,795	2						2	18,795	18,795	
Mahoning	18,441	2						2	18,441	18,441	
Meigs	3,298,895	2	2	3,298,895	2,735,000		563,895				
Monroe	3,142,743	1	1	3,142,743	2,712,079		430,664				
Morgan	856,734	1 ³						1 ³	856,734	827,723	29,011
Muskingum	476,391	1 ²						1 ²	476,391	380,082	96,309
Noble	979,561	8						8	979,561	976,721	2,840
Perry	427,823	8						8	427,823	359,732	68,091
Stark	392,049	6						6	392,049	392,049	
Tuscarawas	2,053,962	34						34	2,053,962	1,868,538	185,424
Vinton	2,548,429	9 ²	1 ⁴	1,010,854	838,046		172,808	9 ²	1,537,575	1,537,575	
Washington	19,547	1 ⁵						1 ⁵	19,547	19,547	
Wayne	3,543	1						1	3,543	3,543	
TOTAL	28,598,415	192	10	13,614,437	9,779,871	0	3,834,566	182	14,983,978	13,735,293	1,248,685

¹Production from mines operating in more than one county was evenly split between the counties involved unless a by-county breakdown was provided by the operator.

²Does not include mines extending into this county from adjoining counties.

³This mine extends into Morgan County from Noble County and is not included in the total number of mines.

⁴This mine extends into Vinton County from Meigs County and is not included in the total number of mines.

⁵This mine extends into Washington County from Noble County and is not included in the total number of mines.

TABLE 4. — 1994 Ohio coal production by county and month

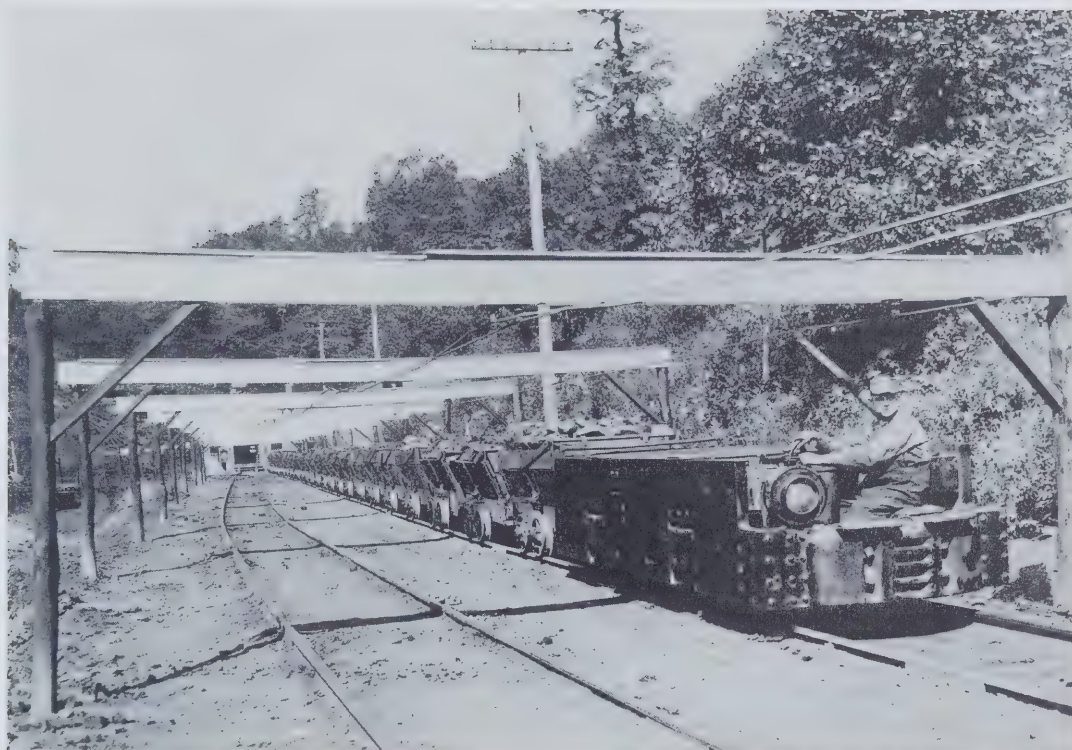
County ¹	Production (short tons)												
	Total annual	January	February	March	April	May	June	July	August	September	October	November	December
Belmont	6,319,728	399,046	538,651	692,366	588,170	581,910	416,606	550,014	628,483	544,276	573,744	351,457	455,005
Carroll	142,868	11,476	11,622	9,179	11,298	11,373	9,914	11,654	11,654	13,529	15,553	13,700	11,916
Columbiana	811,171	88,218	81,069	63,039	67,819	61,931	76,123	59,028	71,888	54,319	67,564	60,620	59,553
Coshocton	1,149,558	71,099	89,374	81,040	90,520	112,309	111,029	110,518	124,806	106,277	91,223	83,157	78,206
Guernsey	303,132	28,661	33,125	18,178	19,824	22,576	22,446	41,199	43,107	19,361	21,188	15,813	17,654
Harrison	2,521,449	240,372	246,699	272,855	249,017	199,146	187,261	164,386	177,136	182,246	240,923	206,529	154,879
Holmes	313,057	23,610	20,124	21,396	25,495	28,173	38,329	29,772	31,442	27,330	27,874	23,096	16,416
Jackson	1,475,426	105,534	116,844	102,641	121,814	122,165	130,043	130,676	131,535	128,291	132,193	128,051	125,639
Jefferson	1,325,113	97,757	105,614	106,397	127,127	134,570	128,613	132,658	114,617	100,695	94,925	89,485	92,655
Lawrence	18,795	235	50	873	764	293	3,782	4,744	4,892	796	1,146	562	658
Mahoning	18,441	1,561	2,776	3,271	1,930	0	0	0	0	1,152	3,460	2,683	1,608
Meigs	3,298,895	205,761	132,511	199,635	245,291	223,345	333,868	165,174	349,938	346,017	347,671	416,854	332,830
Monroe	3,142,743	207,246	337,592	323,908	311,360	330,218	204,476	178,493	220,880	295,112	325,961	213,266	194,231
Morgan	856,734	0	17,009	81,430	32,459	43,730	84,536	80,432	138,146	127,998	118,271	30,291	102,432
Muskingum	476,391	42,240	93,499	69,720	53,560	64,992	36,346	31,642	21,273	17,030	14,179	14,910	17,000
Noble	979,561	131,664	103,775	112,199	119,312	55,120	67,585	72,912	72,482	69,663	64,573	57,300	52,976
Perry	427,823	30,479	30,840	29,335	29,940	26,105	24,565	24,617	25,048	48,583	45,212	47,331	65,768
Stark	392,049	38,127	41,025	37,948	25,019	28,180	29,906	26,239	38,463	30,168	35,633	30,926	30,415
Tuscarawas	2,053,962	188,731	216,240	217,121	186,281	156,788	171,285	180,340	169,432	166,039	124,391	148,004	129,310
Vinton	2,548,429	89,576	91,687	152,104	235,993	257,170	276,414	234,431	237,466	177,936	244,721	282,270	268,661
Washington	19,547	0	0	0	0	0	0	7,099	4,358	8,090	0	0	0
Wayne	3,543	0	0	0	0	0	0	0	682	0	0	2,861	0
TOTAL	28,598,415	2,001,393	2,310,126	2,594,635	2,542,993	2,460,094	2,353,127	2,236,028	2,617,728	2,464,908	2,590,405	2,214,908	2,207,812

¹Production from mines operating in more than one county was evenly split between the counties involved unless a by-county breakdown was provided by the operator.

TABLE 5. — 1994 Ohio coal production

County ¹	Production										
	Total	Sharon (No. 1)	Quakertown (No. 2)	Lower Mercer (No. 3)	Upper Mercer (No. 3A)	Brookville (No. 4)	Winters	Clarion (No. 4A)	Lower Kittanning (No. 5)	Strasburg (No. 5A)	
Belmont	6,319,728	72,070	7,911	35,994	10,614	25,935	32,517	655,215	565,993		
Carroll	142,868										
Columbiana	811,171										
Coshocton	1,149,558										
Guernsey	303,132										
Harrison	2,521,449										
Holmes	313,057										
Jackson	1,475,426										
Jefferson	1,325,113										
Lawrence	18,795										
Mahoning	18,441										
Meigs	3,298,895										
Monroe	3,142,743										
Morgan	856,734										
Muskingum	476,391										
Noble	979,561										
Perry	427,823										
Stark	392,049										
Tuscarawas	2,053,962										
Vinton	2,548,429										
Washington	19,547										
Wayne	3,543										
TOTAL	28,598,415	72,070	7,911	108,261	339,373	692,569	137,566	5,161,235	1,953,225	32,520	

¹Production from mines operating in more than one county was evenly split between the counties involved unless a by-county breakdown was provided by the operator.



Electric locomotive manufactured by the Jeffrey Mining Equipment Company towing a shuttle train loaded with coal from the Blaine mine, operated by the Lorain Coal & Dock Company. This drift mine, located west of Blaine, in Pease Township, Belmont County, produced Pittsburgh (No. 8) coal. The mine was abandoned in 1957. Circa 1920. Photo courtesy of the Ohio Historical Society, Jeffrey Mining Equipment Company collection.

by county and seam

(short tons)										County
Middle Kittanning (No. 6)	Lower Freeport (No. 6A)	Upper Freeport (No. 7)	Mahoning (No. 7A)	Harlem	Pittsburgh (No. 8)	Pomeroy-Redstone (No. 8A)	Meigs Creek (No. 9)	Waynesburg (No. 11)	Washington (No. 12)	
6,349	1,712	47,490	47,490	33,479	4,781,323		1,198,139	333,931	6,335	Belmont
105,737	49,326	477,337	138,642							Carroll
873,128										Columbiana
76,580		182,062			44,490					Coshocton
	965,232			101,685	1,313,764	55,991	84,777			Guernsey
186,046										Harrison
78,448	27,278									Holmes
659		360,405			856,902	107,147				Jackson
										Jefferson
										Lawrence
					3,142,743					Mahoning
							856,734			Meigs
							240,094			Monroe
224,918	11,379									Morgan
										Muskingum
							979,561			Noble
386,298										Perry
60,709	1,500									Stark
638,440	32,131	663,599								Tuscarawas
159,725		130,880								Vinton
							19,547			Washington
3,543										Wayne
2,800,580	1,088,558	1,861,773	186,132	135,164	10,139,222	163,138	3,378,852	333,931	6,335	TOTAL

TABLE 6. — 1994 Disposition of Ohio coal, by county

County ¹	Number of mines	Disposition ¹ (short tons)						Stored
		Total ²	Rail	Water	Truck	Conveyor	Unspecified/ other	
Belmont	28 ³	6,329,638	3,667,000	228,790	2,433,848			494,983
Carroll	2 ³	142,868			142,868			
Columbiana	18	811,171			811,171			
Coshocton	11	1,148,344		175,972	972,372			17,785
Guernsey	9	303,219		8,630	294,589			184
Harrison	15	2,523,986	65,214	526,730	1,930,943		1,099	44,841
Holmes	6	313,057			313,057			
Jackson	9 ³	1,475,426		406,919	1,068,507			
Jefferson	20	1,330,647		52,536	1,278,111			2,635
Lawrence	2	18,795			18,795			
Mahoning	2	18,441			18,441			
Meigs	2	3,314,321				3,314,321		6,232
Monroe	1	2,943,041		2,940,792	2,249			283,862
Morgan	1 ⁴	847,744				847,735	9	18,746
Muskingum	1 ³	476,836			236,297	240,539		203
Noble	8	978,755			757,686	221,069		806
Perry	8	427,456			427,456			5,809
Stark	6	392,049			392,049			
Tuscarawas	34	2,039,929	43,870	8,993	1,987,066			164,927
Vinton	9 ³	2,825,168		320,835	1,494,341	1,009,992		6,232
Washington	1 ⁵	19,547			19,547			
Wayne	1	3,543			3,543			
TOTAL	192	28,683,981	3,776,084	4,670,197	14,602,936	5,633,656	1,108	1,047,245

¹Tonnage of coal shipped from mines operating in more than one county was evenly split between the counties involved and type(s) of disposition reported unless a by-county breakdown was provided by the operator.

²Does not reflect tonnage stored. Reflects tonnage sold and shipped from mine.

³Does not include mines extending into this county from adjoining counties.

⁴This mine extends into Morgan County from Noble County and is not included in the total number of mines.

⁵This mine extends into Washington County from Noble County and is not included in the total number of mines.

TABLE 7. — 1994 Rail shipments of Ohio coal, by county of origin and carrier

County	Number of mines	Shipments (short tons)			
		Total	Conrail	Ohio Central	Wheeling & Lake Erie
Belmont	1	3,667,000	3,667,000		
Harrison	1	65,214			65,214
Tuscarawas	1	43,870		43,870	
TOTAL	3	3,776,084	3,667,000	43,870	65,214

TABLE 8. — 1994 Washed Ohio coal

		Raw coal (short tons)	Washed coal (short tons)	Loss in washing (short tons)	Loss in washing (percent)	Percent of all washed coals
By type of mining	From surface mines	7,977,892 ¹	6,696,995 ¹	1,280,897	16.1	34.4
	From underground mines	21,137,237 ¹	12,760,374 ¹	8,376,863	39.6	65.6
	TOTAL	29,115,129 ¹	19,457,369 ²	9,657,760	33.2	100.0
By seam	Sharon (No. 1)	82,268	72,070	10,198	12.4	0.4
	Lower Mercer (No. 3A)	62,292	52,983	9,309	14.9	0.3
	Brookville (No. 4)	62,834	49,254	13,580	21.6	0.2
	Winters	190,148	137,105	53,043	27.9	0.7
	Clarion (No. 4A)	8,870,461	4,542,692	4,327,769	48.8	23.3
	Lower Kittanning (No. 5)	717,090	582,657 ¹	134,433	18.7	3.0
	Middle Kittanning (No. 6)	473,296	382,494 ¹	90,802	19.2	2.0
	Lower Freeport (No. 6A)	627,443	469,746	157,697	25.1	2.4
	Upper Freeport (No. 7)	2,088,310 ¹	1,489,242 ¹	599,068	28.7	7.6
	Pittsburgh (No. 8)	9,942,434 ¹	6,521,208 ¹	3,421,226	34.4	33.5
	Meigs Creek (No. 9)	1,531,493	1,336,194 ¹	195,299	12.8	6.9
	Waynesburg (No. 11)	405,375 ¹	342,957	62,418	15.4	1.8
	Washington (No. 12)	38,004 ¹	32,152	5,852	15.4	0.2
	Other ³	4,023,681 ¹	3,446,615 ¹	577,066	14.3	17.7
	TOTAL	29,115,129 ¹	19,457,369 ²	9,657,760	33.2	100.0

¹The raw tonnage (before washing) and/or the clean tonnage (after washing) of coal was estimated for those mines which failed to report this information. These estimates were calculated using a statewide-average loss-in-washing percentage based on raw/washed coal values for type of mining and for seam deemed to be reliable.

²These figures reflect total washed coal in 1994 as reported by Ohio's coal preparation plants. These figures do not necessarily represent only 1994 production. In 1994, 28,604,761 tons of coal were produced, of which 16,638,866 tons (58.2%) were reported as washed by Ohio's mine operators. Coal not designated as washed or unwashed by Ohio's mine operators was assumed to be unwashed.

³Unspecified tonnages of seams listed above.

TABLE 9. — 1994 Dollar value of coal at mine by county and mining method

County ¹	Total				Surface				Underground			
	No. of mines	Tonnage sold (short tons)	Value at mine ² (dollars)	Per ton average (dollars)	No. of mines	Tonnage sold (short tons)	Value at mine ² (dollars)	Per ton average (dollars)	No. of mines	Tonnage sold (short tons)	Value at mine ² (dollars)	Per ton average (dollars)
Belmont	28 ³	6,329,638	\$147,583,838	\$23.32	27 ³	1,794,118	\$45,808,712	\$25.53	1	4,535,520	\$101,775,126	\$22.44
Carroll	2 ³	142,868	3,464,521	24.25	2 ³	142,868	3,464,521	24.25				
Columbiana	18	811,171	17,487,090	21.56	14	505,544	12,518,311	24.76	4	305,627	4,968,779	16.26
Coshocton	11	1,148,344	32,098,951	27.95	11	1,148,344	32,098,951	27.95				
Guernsey	9	303,219	7,564,125	24.95	9	303,219	7,564,125	24.95				
Harrison	15	2,523,986	61,104,872	24.21	14	1,556,539	38,260,596	24.58	1	967,447	22,844,276	23.61
Holmes	6	313,057	5,495,282	17.55	6	313,057	5,495,282	17.55				
Jackson	9 ³	1,475,426	34,320,385	23.26	9 ³	1,475,426	34,320,385	23.26				
Jefferson	20	1,330,647	33,627,144	25.27	19	970,654	24,492,943	25.23	1	359,993	9,134,201	25.37
Lawrence	2	18,795	250,415	13.32	2	18,795	250,415	13.32				
Mahoning	2	18,441	383,193	20.78	2	18,441	383,193	20.78				
Meigs	2	3,314,321	147,379,523	44.47					2	3,314,321	147,379,523	44.47
Monroe	1	2,943,041	83,402,323	28.34					1	2,943,041	83,402,323	28.34
Morgan	1 ⁴	847,744	19,574,409	23.09	1 ⁴	847,744	19,574,409	23.09				
Muskingum	1 ³	476,836	11,010,143	23.09	1 ³	476,836	11,010,143	23.09				
Noble	8	978,755	16,080,945	16.43	8	978,755	16,080,945	16.43				
Perry	8	427,456	8,159,957	19.09	8	427,456	8,159,957	19.09				
Stark	6	392,049	6,108,386	15.58	6	392,049	6,108,386	15.58				
Tuscarawas	34	2,039,929	43,208,293	21.18	34	2,039,929	43,208,293	21.18				
Vinton	9 ³	2,825,168	88,307,451	31.26	9 ³	1,815,176	42,852,577	23.61	1 ⁵	1,009,992	45,454,874	45.01
Washington	1 ⁶	19,547	321,157	16.43	1 ⁶	19,547	321,157	16.43				
Wayne	1	3,543	81,808	23.09	1	3,543	81,808	23.09				
TOTAL	192	28,683,981	\$767,014,211	\$26.74	182	15,248,040	\$352,055,109	\$23.09	10	13,435,941	\$414,959,102	\$30.88

¹Sales reported from mines operating in more than one county were evenly split between the counties involved unless a by-county breakdown was provided by the operator.

²The FOB value of coal sold was estimated for those mines which failed to report this information. These estimates were calculated using a countywide-average price per ton by mining method based on reported FOB values deemed to be reliable.

³Does not include mines extending into this county from adjoining counties.

⁴This mine extends into Morgan County from Noble County and is not included in the total number of mines.

⁵This mine extends into Vinton County from Meigs County and is not included in the total number of mines.

⁶This mine extends into Washington County from Noble County and is not included in the total number of mines.

TABLE 10. — 1994 Ohio coal-mine employment¹, by occupational group and month

Occupational group	Number of employees												
	Monthly average	January	February	March	April	May	June	July	August	September	October	November	December
All production workers	2,399	2,469	2,463	2,412	2,580	2,476	2,460	2,411	2,419	2,392	2,269	2,276	2,157
Underground mines	1,026	1,061	1,053	1,042	1,032	1,028	1,017	1,017	1,013	1,007	994	1,036	1,011
Surface mines	1,373	1,408	1,410	1,370	1,548	1,448	1,443	1,394	1,406	1,385	1,275	1,240	1,146
Supervisory, technical, and clerical	738	715	729	730	754	751	749	754	753	728	736	737	725
Central preparation plant, central shop, etc.	600	551	566	590	624	625	617	621	601	601	603	606	597
Reclamation	123	88	90	91	112	156	159	134	131	133	143	126	110
Other ²	189	186	189	183	179	183	184	192	187	183	198	203	196
TOTAL	4,049	4,009	4,037	4,006	4,249	4,191	4,169	4,112	4,091	4,037	3,949	3,948	3,785

¹Employment was estimated for mines not reporting employment.²"Other" includes all employees who are not categorized in any other employment category, such as mobile equipment operators, mechanics, or general outside workers.TABLE 11. — 1994 Ohio coal-mine production employment¹, by county and month

County ²	Number of employees												
	Monthly average	January	February	March	April	May	June	July	August	September	October	November	December
Belmont	327	379	356	357	338	330	341	310	292	301	326	310	289
Carroll	10	13	10	10	10	8	8	9	10	11	10	11	14
Columbiana	92	106	106	105	106	89	82	83	78	86	77	109	76
Coshocton	106	84	90	84	97	117	117	125	136	131	108	110	69
Guernsey	42	47	49	40	49	44	40	44	48	38	34	32	35
Harrison	220	253	247	244	241	218	207	219	212	213	195	200	188
Holmes	30	26	27	29	37	30	33	35	35	32	28	25	18
Jackson	85	88	90	87	81	82	82	87	85	83	87	87	84
Jefferson	157	169	152	160	184	178	178	171	161	155	130	126	120
Lawrence	9	10	11	11	9	10	10	11	10	6	7	7	7
Mahoning	2	2	2	2	3	2	2	1	1	1	1	1	1
Meigs	334	336	334	329	328	336	336	335	337	338	332	334	337
Monroe	218	223	225	223	216	215	215	216	217	216	212	212	220
Morgan	40	20	19	19	43	33	31	56	55	53	51	52	52
Muskingum	31	43	47	47	47	43	42	20	20	15	16	16	16
Noble	71	95	97	97	77	75	75	57	58	54	59	55	49
Perry	47	49	48	47	48	47	45	38	41	53	50	49	53
Stark	64	63	81	63	77	74	74	65	68	66	43	45	44
Tuscarawas	221	224	236	233	275	235	233	208	230	224	196	187	176
Vinton	291	238	235	224	313	309	308	315	319	309	306	307	308
Washington	1	0	0	0	0	0	0	5	5	6	0	0	0
Wayne	1	1	1	1	1	1	1	1	1	1	1	1	1
TOTAL	2,399	2,469	2,463	2,412	2,580	2,476	2,460	2,411	2,419	2,392	2,269	2,276	2,157

¹Employment was estimated for mines not reporting employment.²For those operations reporting activity in more than one county, employment was evenly split (to the nearest whole employee) between the counties involved unless a by-county breakdown was provided by the operator.

TABLE 12. — 1994 Ohio coal-mine employment¹ in central preparation plants, central shops, etc., by county and month

County ²	Number of employees												
	Monthly average	January	February	March	April	May	June	July	August	September	October	November	December
Belmont	65	73	67	67	65	65	64	67	62	62	62	63	60
Carroll	1	2	2	1	1	1	1	2	2	2	1	1	1
Columbiana	40	40	40	40	40	39	40	39	39	39	41	41	40
Coshocton	30	30	30	30	30	30	29	29	28	28	30	30	30
Guernsey	3	3	3	3	3	3	3	3	3	3	3	3	3
Harrison	17	19	20	18	18	18	18	17	13	13	20	18	15
Jackson	11	11	11	11	11	12	11	11	11	11	12	11	12
Jefferson	20	17	21	21	19	19	19	20	20	20	20	20	20
Lawrence	8	2	2	2	9	9	9	11	11	11	11	10	10
Mahoning	4	4	4	4	3	3	3	4	3	3	5	6	5
Meigs	61	48	54	61	68	69	67	65	60	60	59	61	61
Monroe	54	50	51	54	54	54	57	58	58	58	53	53	51
Morgan	74	27	27	27	59	60	60	107	107	106	104	105	104
Muskingum	18	40	40	40	31	32	32	3	0	0	0	0	0
Noble	16	44	44	44	20	21	21	0	1	0	1	0	0
Perry	8	10	9	10	8	7	3	8	8	8	8	8	8
Scioto	12	0	0	0	16	16	16	15	15	15	15	16	16
Tuscarawas	57	56	59	61	61	60	59	58	56	57	52	52	51
Vinton	101	75	82	96	108	107	105	104	104	105	106	108	110
TOTAL	600	551	566	590	624	625	617	621	601	601	603	606	597

¹Employment was estimated for mines not reporting employment.²For those operations reporting activity in more than one county, employment was evenly split (to the nearest whole employee) between the counties involved unless a by-county breakdown was provided by the operator.TABLE 13. — 1994 Ohio coal-mine employment¹ in supervisory, technical, and clerical positions, by county and month

County ²	Number of employees												
	Monthly average	January	February	March	April	May	June	July	August	September	October	November	December
Belmont	127	126	122	125	125	126	127	128	129	127	132	130	130
Carroll	5	7	6	6	6	6	5	4	4	4	4	5	4
Columbiana	22	23	23	23	23	23	21	21	21	21	20	22	21
Coshocton	25	17	18	18	26	29	29	28	29	28	27	28	25
Guernsey	6	6	6	6	9	8	7	5	5	4	5	5	4
Harrison	37	37	39	38	37	35	31	39	39	38	36	37	36
Hocking	1	1	1	1	1	1	1	1	1	1	1	1	1
Holmes	1	1	1	1	1	1	1	1	1	1	1	1	1
Jackson	15	13	14	13	14	15	14	16	15	16	16	16	16
Jefferson	18	19	18	18	22	21	21	19	18	15	13	14	14
Lawrence	4	2	2	2	4	4	7	4	4	4	5	5	5
Mahoning	4	4	4	5	2	2	2	4	4	4	4	4	4
Meigs	143	143	144	143	144	143	144	144	143	143	142	142	142
Monroe	67	58	69	69	67	67	68	69	63	63	69	70	69
Morgan	51	24	23	19	42	42	42	76	77	70	69	67	66
Muskingum	15	31	31	30	23	23	23	5	5	5	3	3	3
Noble	18	38	38	38	21	21	21	5	7	8	8	8	8
Perry	7	6	6	7	7	7	7	7	8	8	8	8	8
Scioto	7	2	1	2	9	9	9	10	10	10	9	9	9
Stark	4	2	8	10	3	3	3	3	3	3	4	4	4
Tuscarawas	49	48	49	49	54	52	52	49	53	42	48	46	42
Vinton	112	107	106	107	114	113	114	115	114	112	112	112	113
Washington	³	0	0	0	0	0	0	1	0	1	0	0	0
TOTAL	738	715	729	730	754	751	749	754	753	728	736	737	725

¹Employment was estimated for mines not reporting employment.²For those operations reporting activity in more than one county, employment was evenly split (to the nearest whole employee) between the counties involved unless a by-county breakdown was provided by the operator.³Averages fewer than one employee per month.

TABLE 14. — 1994 Ohio surface coal-mine reclamation employment¹, by county and month

County ²	Number of employees												
	Monthly average	January	February	March	April	May	June	July	August	September	October	November	December
Belmont	9	6	6	6	7	20	19	6	6	6	8	9	8
Carroll	4	1	1	1	1	6	7	5	6	6	5	5	3
Columbiana	2	3	3	4	2	2	2	1	2	2	2	2	2
Coshocton	3	4	5	4	2	2	2	2	2	2	3	3	3
Guernsey	3	3	3	2	4	4	6	3	3	5	3	3	2
Harrison	2	1	2	2	1	1	1	1	2	2	5	5	5
Jackson	1	0	0	0	1	1	1	1	1	1	1	1	1
Jefferson	8	5	4	3	7	5	15	14	13	8	6	7	9
Lawrence	3	0	0	0	10	10	8	0	0	0	3	3	3
Mahoning	1	0	0	0	1	2	2	2	2	2	1	1	1
Morgan	50	14	14	15	33	46	46	77	78	75	74	69	61
Muskingum	11	20	21	21	17	24	24	3	0	0	0	0	0
Noble	10	22	23	24	12	16	16	0	1	0	1	0	0
Perry	1	0	0	0	0	0	0	1	1	1	5	4	0
Stark	2	0	0	0	3	5	2	1	1	1	2	3	2
Tuscarawas	7	3	2	3	5	6	2	11	7	16	18	5	4
Vinton	6	6	6	6	6	6	6	6	6	6	6	6	6
TOTAL	123	88	90	91	112	156	159	134	131	133	143	126	110

¹Employment was estimated for mines not reporting employment.²For those operations reporting activity in more than one county, employment was evenly split (to the nearest whole employee) between the counties involved unless a by-county breakdown was provided by the operator.TABLE 15. — 1994 Ohio coal-mine employment¹ in other positions², by county and month

County ³	Number of employees												
	Monthly average	January	February	March	April	May	June	July	August	September	October	November	December
Belmont	69	70	70	67	63	65	64	73	72	69	69	73	70
Columbiana	10	9	9	9	11	11	11	9	11	10	10	10	7
Coshocton	5	5	5	5	5	5	5	5	5	5	5	5	5
Harrison	9	9	9	9	9	9	9	9	9	9	9	9	9
Jackson	8	8	8	8	6	6	6	9	9	9	9	9	9
Jefferson	14	16	16	16	16	18	17	10	8	8	16	16	16
Lawrence	2	2	2	2	1	1	1	5	3	3	0	0	0
Mahoning	⁴ 0	0	0	0	0	0	0	0	0	1	1	1	1
Meigs	29	27	29	28	28	28	29	29	29	29	32	32	32
Morgan	9	5	5	4	7	7	7	13	12	10	11	13	13
Muskingum	4	5	5	5	6	6	6	3	2	2	2	2	2
Noble	3	7	7	7	3	3	3	1	1	1	1	0	0
Perry	1	1	1	1	1	1	1	1	1	2	2	2	1
Scioto	2	0	0	0	3	3	3	3	3	3	3	3	3
Tuscarawas	4	4	4	4	2	2	2	3	3	3	6	6	6
Vinton	20	18	19	18	18	18	20	19	19	19	22	22	22
TOTAL	189	186	189	183	179	183	184	192	187	183	198	203	196

¹Employment was estimated for mines not reporting employment.²"Other positions" includes all employees who do not belong in any other employment category, such as mobile equipment operators, mechanics, or general outside workers.³For those operations reporting activity in more than one county, employment was evenly split (to the nearest whole employee) between the counties involved unless a by-county breakdown was provided by the operator.⁴Averages fewer than one employee per month.

TABLE 16. — 1994 Wage and salary payments to Ohio coal-mine employees, by county and occupational group

County ¹	Wage and salary payments (nearest whole dollar) ²						
	All occupations	Underground production employees	Surface production employees	Central preparation plant, central shop, etc.	Supervisory, technical, and clerical	Reclamation	Other
Belmont	\$26,792,148	\$9,232,042	\$4,339,962	\$2,387,800	\$7,281,559	\$150,870	\$3,399,915
Carroll	514,055		329,368	19,973	109,723	54,991	
Columbiana	5,114,590	1,613,143	1,357,203	1,235,765	673,514	40,770	194,195
Coshocton	5,774,807		3,441,035	1,053,590	1,044,467	80,865	154,850
Guernsey	1,386,727		1,120,404	59,383	168,978	37,962	
Harrison	12,721,193	4,595,175	4,952,528	868,483	1,798,264	38,036	468,707
Hocking	17,171				17,171		
Holmes	799,558		761,558		38,000		
Jackson	4,030,711		2,724,601	410,836	627,164	2,685	265,425
Jefferson	7,187,646	1,160,095	4,361,126	599,287	621,660	154,218	291,260
Lawrence	620,971		115,503	240,126	172,667	76,847	15,828
Mahoning	288,297		49,192	137,831	74,148	21,138	5,988
Meigs	29,007,095	15,960,158		2,782,022	8,999,856		1,265,059
Monroe	19,088,162	12,501,159		2,648,778	3,938,225		
Morgan	8,260,046		1,160,715	2,114,961	3,310,008	1,416,663	257,699
Muskingum	2,832,444		999,762	609,331	745,887	365,097	112,367
Noble	5,121,587		3,230,068	570,064	900,404	329,373	91,678
Perry	1,735,994		1,348,311	108,522	212,458	26,354	40,349
Scioto	769,587			334,587	300,000		135,000
Stark	2,166,277		1,969,941		171,582	24,754	
Tuscarawas	8,552,045		5,366,081	1,610,517	1,398,236	124,688	52,523
Vinton	23,538,711	6,080,002	5,260,859	4,224,846	6,998,208	99,746	875,050
Washington	67,030		59,615		7,415		
Wayne	31,303		31,303				
TOTAL	\$166,418,155	\$51,141,774	\$42,979,135	\$22,016,702	\$39,609,594	\$3,045,057	\$7,625,893

¹For those operations reporting activity in more than one county, wage and salary payments were evenly split between the counties involved unless a by-county breakdown was provided by the operator.

²For those operations reporting only a total wage and salary payment to all workers, an equal pay rate was assumed for all employees. In cases where quarterly employment was reported but wage and salary payments were not, wage and salary payments for that quarter were estimated from reported payments in the other quarters to arrive at the annual figure. For mines reporting employment and no wage and salary payments, wage and salary payments were estimated using a county-wide or state-wide average.



Electric coal-cutting machine undercutting a seam of coal. This machine greatly increased productivity and lessened the amount of physical effort needed in undercutting a seam of coal by hand. Note the timber roof support. *Circa 1910.* Photo courtesy of the Ohio Historical Society, Jeffrey Mining Equipment Company collection.

INDUSTRIAL MINERALS

Industrial minerals, other than mineral fuels, were produced in a total of 87 Ohio counties in 1994. The combined value of all nonfuel industrial minerals sold in 1994 was \$594,980,800.

In 1994, 446 companies operated 678 industrial-mineral mining operations. Industrial minerals were produced or sold from 542 of these operations. Thirty-eight of the 446 companies produced more than one mineral commodity from 47 operations. Seventeen of these companies produced coal and one or more industrial-mineral commodity from 23 operations. (Seven operations produced coal and only one industrial-mineral commodity.) Twenty-one companies produced multiple industrial-mineral commodities (no coal) from 24 operations. The remaining companies produced one industrial-mineral commodity.

Of the 40 multiple industrial-mineral operations (including those operations producing coal and more than one industrial-mineral commodity), 11 operations produced clay and shale; 8 operations produced sand and gravel and clay; 3 operations produced sandstone and sand and gravel; 5 operations produced limestone and clay; 2 operations produced limestone, clay, and shale; 2 operations produced

sand and gravel, clay, and peat; 2 operations produced limestone and shale; 1 operation produced limestone, sandstone, clay, and shale; 1 operation produced limestone, sand and gravel, and clay; 1 operation produced limestone, sandstone, and clay; 1 operation produced sandstone and shale; 1 operation produced sandstone, clay, and shale; 1 operation produced sand and gravel and limestone; and 1 operation produced sand and gravel and shale.

The 241 multiple industrial-mineral commodity production employees worked an average of 191 days in 1994. Total wages of \$7,707,368 were paid to a total of 291 employees (241 production employees and 50 nonproduction employees). The average annual wage, based on those employees for whom wages were reported, was \$26,486.

The total average annual employment reported in 1994 for industrial mineral operations was 4,767 people (3,396 production employees and 1,371 nonproduction employees). Total wages for all employees at industrial mineral operations in 1994 were \$145,286,165. The average annual wage, based on those employees for whom wages were reported, was \$30,477.

TABLE 17. — 1994 Value of Ohio industrial minerals

Commodity	Sales (tons)	Change from 1993 (tons/percent)	Value ¹ (dollars)	Percent of total value
Limestone and dolomite	63,169,439	+ 2,464,325/+ 4.1	\$276,119,905	46.4
Sand and gravel	51,573,324	+ 3,803,849/+ 8.0	191,699,824	32.2
Salt	4,445,918	+ 883,566/+ 24.8	75,109,758	12.6
Sandstone and conglomerate	1,819,421	- 113,838/- 5.9	32,773,396	5.5
Clay	1,835,690	+ 124,607/+ 7.3	8,643,483	1.5
Shale	3,135,729	+ 1,834,313/+ 140.9	8,123,123	1.4
Gypsum	259,105	+ 25,933/+ 11.1	2,461,499	0.4
Peat	7,035	- 10,798/- 60.6	49,812	<0.1
TOTAL	126,245,661	+ 9,011,957/+ 7.7	\$594,980,800	100.0

¹The FOB value of industrial minerals sold was estimated for those mines which failed to report this information and for those producing material for captive use. These estimates were calculated using a countywide- or statewide-average price per ton based on reported FOB values.



A blast in the Columbus Limestone quarry of the Rogers Group, Sandusky Crushed Stone Company in Sandusky, Erie County. The rock is blasted to loosen it from the highwall so it can be transported to a processing plant for further crushing and screening. Photo taken during the 1995 Mineral Industries and the Environment—North teachers workshop.



“We Work Together” is the slogan at the brick plant of Belden Brick Company in Sugarcreek, Tuscarawas County. Belden Brick Company can manufacture 220 million bricks per year, so their slogan must work. Photo taken during the 1995 Mineral Industries and the Environment—North teachers workshop.

TABLE 18. — 1994 Employment at Ohio industrial mineral operations, by county and commodity

County ¹	Number of employees ²													
	Total		Limestone and dolomite		Sand and gravel		Sandstone and conglomerate		Clay		Shale		Salt	
	Pro-duction	Non-pro-duction	Pro-duction	Non-pro-duction	Pro-duction	Non-pro-duction	Pro-duction	Non-pro-duction	Pro-duction	Non-pro-duction	Pro-duction	Non-pro-duction	Pro-duction	Non-pro-duction
Adams	14	27	14	27	3	0					1	0		
Allen	30	4	27	4	34	11								
Ashland	35	11			6	2			1	0			5	2
Ashtabula	11	4			6	16							5	1
Athens	12	17							1	0			13	3
Auglaize	20	12	11	7	8	5								
Belmont	24	10	8	2	3	5								
Brown ³	0	0												
Butler	81	95			81	95			1	0				
Carroll	8	3			7	3							4	4
Champaign	19	5			19	5								
Clark	43	21	1	1	42	20								
Clermont	7	5			7	5								
Clinton	28	12	28	12	9	1			8	0	9	1		
Columbiana	27	2					1	0						
Coshocton	31	56	4	1	10	49	11	3	4	2	3	1	64	194
Crawford	45	1	44	1	1	0								
Cuyahoga	67	195												
Darke	17	8	14	4	3	4								
Defiance	2	0			2	0								
Delaware	47	8	47	8										
Erie	134	23	120	20	5 ⁵	1 ⁵	1	1	8	1			1	0
Fairfield	9	5			7	5			1	0				
Fayette	11	2	11	2										
Franklin	176	51	58	13	107	37							11	1
Fulton	2	1			2	1								
Gallia	13	4			13	4								
Geauga	44	75			24	7	16	65					4	3
Greene	54	24	7	6	47	18								
Guernsey	5	3	5	3										
Hamilton	68	64			68	64								
Hancock	29	1	29	1										
Hardin	6	5	5	5	1	0					2	1		
Harrison	2	1			5	1								
Henry	5	1												
Highland	23	21	23	21										
Hocking	16	3			6	0			3	1	3	1	4	1
Holmes	18	9			12	7			1	1			5	1
Huron	8	2			7	2	1	0	3	5			5	1
Jackson	13	7	5	1										
Jefferson	3	1			3	1								
Knox	51	26			23	25	27	1	1	0	1	0	98	0
Lake	106	3			5 ⁵	2 ⁵	2	1	1	0			1	1
Lawrence	16	3			6	1			2	1	1	1		
Licking	28	6			24	3							10	2

¹For those operations reporting activity in more than one county, employment was evenly split (to the nearest whole employee) between the counties unless a by-county breakdown was provided by the operator.

²Employment is not included for mines which were owner operated.

³This county reported no production or sales of industrial minerals in 1994.

⁴Employment information is not available.

⁵Employment for Lake Erie sand and gravel dredging operations is included in the total employment figure for the county in which the operation is based.

LIMESTONE AND DOLOMITE

Limestone and dolomite were sold or produced by 82 companies at 125 operations in 50 Ohio counties during 1994. Sales of limestone and dolomite totalled 63,169,439 tons (+4.1 percent from 1993); Erie, Franklin, Ottawa, Wyandot, and Sandusky Counties accounted for 39.4 percent of those sales. Reported known production totalled 62,415,343 tons.

Lime produced from Ohio limestone and dolomite totalled 1,737,530 tons in 1994 and came from five operations in Ottawa, Sandusky, and Wyandot Counties. Ohio ranks first nationally in the production of lime out of 35 producing states. The top five states, in descending order of lime production, are Ohio, Missouri, Alabama, Pennsylvania, and Kentucky. Out of 48 producing states, Ohio ranks seventh in the production of crushed stone, which includes

crushed sandstone. The top five states, in descending order of production, of crushed stone are Texas, Pennsylvania, Florida, Illinois, and Missouri.⁴

The total value⁵ of limestone and dolomite sold in 1994 was \$276,119,905. Average price per ton was \$4.37.

An annual average of 1,473 employees worked an average of 216 days to produce limestone and dolomite. Total wages of \$60,287,564 were paid to a total of 1,842 employees (1,473 production employees and 369 nonproduction employees). The average annual wage, based on those employees for whom wages were reported, was \$32,729. An additional 124 people (104 production employees and 20 nonproduction employees) were employed by operations mining limestone and dolomite along with one or more other mineral commodities.

Primary uses for crushed and broken limestone and dolomite were road construction/resurfacing and commercial building. Other major uses for various forms of limestone and dolomite included stone for portland cement concrete, production of lime, asphaltic concrete, and aglime.

⁴Preliminary information from U.S. Bureau of Mines.

⁵Includes reported and estimated values. See footnote 1, p. 7.

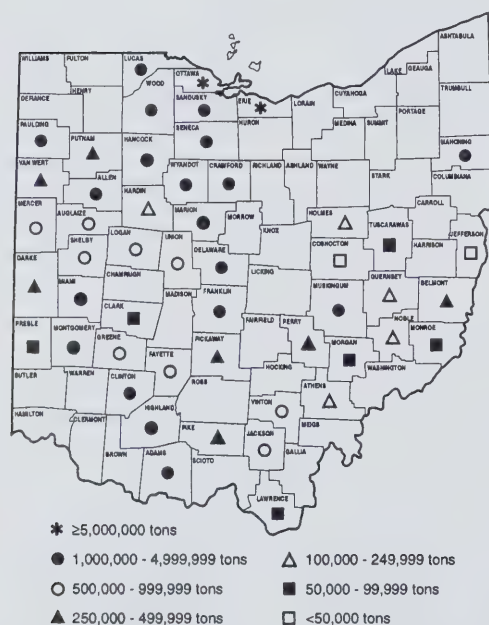


FIGURE 6.—Sales of limestone and dolomite in Ohio in 1994, by county.



FIGURE 7.—Sales and value of limestone and dolomite in Ohio. Value line dashed where data not available.

TABLE 19. — 1994 Production of lime from Ohio stone, by county and type

County	Total tons ¹	Building (tons)	Chemical and industrial (tons)	Refractory (tons)	Other (tons)
Ottawa	115,727	64,273	51,454		
Sandusky	1,508,440		361,390	684,512	462,538
Wyandot	113,363		113,363		
TOTAL	1,737,530	64,273	526,207	684,512	462,538

¹Burning produced a 47.0 percent weight loss.

TABLE 20. — 1994 Ohio limestone and dolomite sales, by county and type

County	Tons sold														
	Total all types	Crushed and broken stone							Unspecified/ other	Dimension stone	Stone for portland cement manufacture	Agricultural stone (aglime)	Raw stone for burning	Unspec- ified/ other	
		Total	Riprap	Flux stone	Stone for portland cement concrete	Stone for asphaltic concrete	Road construc- tion/resur- facing	Commer- cial building							Railroad ballast
Adams	1,864,937	1,864,937				29,850	25,000	1,386,029	24,679	1,864,937					356,275
Allen	1,825,256	1,465,956	398				239,376								
Athens	239,376	662,457	37,425			17,868	87,651	422,385							
Auglaize	667,882	355,608	267,957												
Belmont	355,608	53,797					53,797								
Clark	53,797	1,061,928	36,317		149,392	197,099	108,716	415,460		154,944					288,452
Clinton	1,366,418	41,232	3,805				37,427								
Coshocton	41,232	1,605,368	6,753	121,299				1,276,465	1,339	121,556					
Crawford	1,527,412	315,506					315,506								
Darke	315,506	4,000,084	33,821		40,000		1,379,075	2,546,983	205						
Delaware	4,013,459	4,587,712	104,558		569,857	490,079	2,562,765	817,722	34,050	8,681					
Erie	5,594,364	457,420	27				323,795	77,413	4,652	51,533					886,958
Fayette	510,961	607,499	3,774				4,259,797	511,392		608,843					
Franklin	5,383,806														
Greene	607,499	127,873					607,499								
Guernsey	127,873	1,088,690	9,025		15,522	41,563	127,873	760,565	319,100	1,330					
Hancock	1,099,176	160,249	329				47,480	95,588		893,559					
Hardin	173,684	1,642,137	4,698				702,317								1,903
Highland	1,681,215	136,163					136,163								
Holmes	136,163	715,669					715,669								
Jackson	747,860	1,813,271	4,545		143,998	104,043									
Jefferson	400	87,625	25,327		4,545			85,980		400					
Lawrence	87,625	721,483						119,998		1,645					
Logan	722,045	1,813,271	4,545												
Lucas	1,817,817	2,264,404						4,545		144,017					
Mahoning	2,306,678	1,006,006	13,113		46,382	52,864	64,013	683,793	4,458	2,200,391					42,274
Marion	1,006,006	560,440	58,640		58,640	58,640	186,980	58,640	58,640	1,421					
Mercer	619,081	1,116,376	7,686		68,809	67,297	859,385			208,600					
Miami	1,591,785	95,195		24,934						88,265					
Monroe	95,195	1,044,963								95,195					391,359
Montgomery	1,333,176	52,140													265
Montgomery	1,333,176	52,140													
Morgan	52,140	1,503,434	102,276		102,278	105,217	893,261	102,278	102,278	95,846					
Muskingum	1,707,993	201,695													6,100
Noble	207,795	4,884,218	108,013	2,468	921,121	228,708	2,818,827	275,600		529,481					8,000
Ottawa	5,199,908	934,133	96,169	81,139	81,139	81,139	351,130	81,139	81,139						
Paulding	1,673,880	433,870					389,327			81,139					
Perry	433,870	378,162	7,501		88,372	3,996	76,668	140,338		44,543					
Pickaway	378,162	315,335	16,052		2,800		296,483			61,287					
Pike	335,931	88,688	11,322				77,300			66					
Preble	93,645	252,063	2,821		38,706										
Putnam	252,063	957,301	18,764	33,977	11,300		210,536	15,877		51,663					
Sandusky	4,056,345	1,639,093	3,240				844,484								
Seneca	2,053,955	614,687	4,485				1,620,329	253,440							186,194
Shelby	614,687	67,297					358,007			3,320					
Tuscarawas	67,297	860,000	15,246		81,316	52,962	59,492								
Union	923,121	495,352	52,962				131,871	3,554	660	712,883					1,243
Van Wert	495,352	1,479,727					124,710								
Vinton	585,131	1,402,179	179,828		217,992	179,810	289,075	1,130		179,188					
Wood	1,402,179	1,274,715	74,006	552,905	323,138	397,717	389,478	2,036,396	170,902	406,880					105,404
Wyandot	4,644,737	1,310,883		816,722	2,965,307	2,113,397	25,292,670	12,172,710	802,102	238,733					
TOTAL	63,169,439	54,823,606	1,310,883	816,722	2,965,307	2,113,397	25,292,670	12,172,710	802,102	9,349,815	1,124,656	1,657,196	3,279,968	2,274,427	

SAND AND GRAVEL

Sand and gravel were sold or produced by 257 companies at 332 operations in 66 Ohio counties plus Lake Erie during 1994. Sales⁶ of sand and gravel totalled 51,573,324 tons (+8.0 percent from 1993). Sand accounted for 25,497,737 tons of the total sand and gravel sold, and gravel accounted for 26,075,587 tons. Butler, Hamilton, Franklin, Portage, and Stark Counties led in sales, accounting for 44.9 percent of the total. Reported known production⁶ of sand and gravel totalled 51,299,688 tons in 1994. Ohio ranks third nationally in the production of construction sand and gravel out of 45 producing states. The top five states, in descending order of production, are California, Michigan, Ohio, Arizona, and

Washington.⁷

A total of 165,353 tons of sand were dredged from Lake Erie in 1994. The Maumee Bay and Maumee River areas are no longer producing sand or gravel.

The total value⁸ of sand and gravel sold in 1994 was \$191,699,824. Average price per ton was \$3.72.

An annual average of 1,252 employees worked an average of 180 days in 1994 to produce sand and gravel. Total wages of \$50,128,472 were paid to a total of 1,885 employees (1,252 production employees and 633 nonproduction employees). The average annual wage, based on those employees for whom wages were reported, was \$26,593. An additional 63 people (51 production employees and 12 nonproduction employees) were employed by operations mining sand and gravel along with one or more other mineral commodities.

Road construction/resurfacing, building, asphaltic concrete, and portland cement concrete were the major uses for Ohio sand and gravel in 1994.

⁶Please note—Sales and production figures for sand include material dredged from Lake Erie.

⁷Preliminary information from U.S. Bureau of Mines.

⁸Includes reported and estimated values. See footnote 1, p. 7.

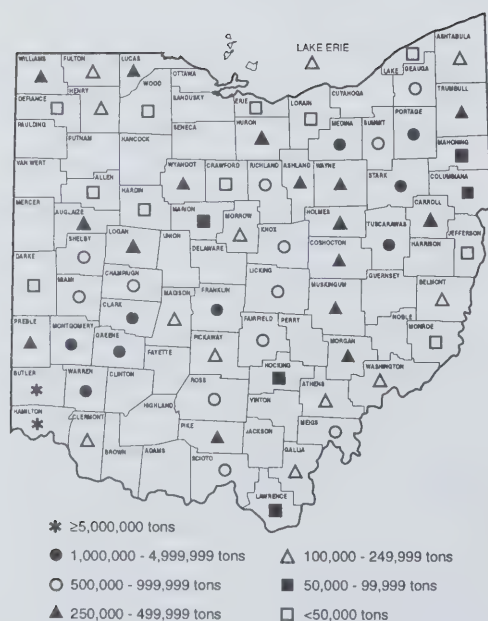


FIGURE 8.—Sales of sand and gravel in Ohio in 1994, by county.

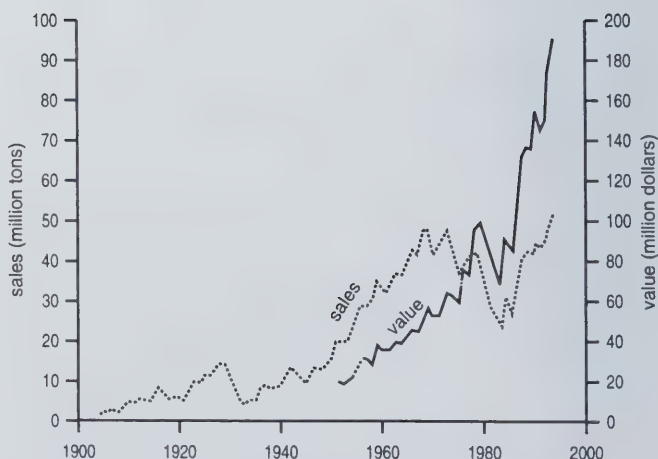


FIGURE 9.—Sales and value of sand and gravel in Ohio. Value line dashed where data not available. Figures from 1984 to 1994 include Lake Erie dredged material.



A conveyor at the Crystal Springs operation of American Sand & Gravel in Massillon, Stark County. The conveyor is carrying sorted sand to a stockpile. Photo taken during the 1995 Mineral Industries and the Environment—North teachers workshop.



A front-end loader about to scoop sand and gravel to load a truck at the Crystal Springs operation of American Sand & Gravel in Massillon, Stark County. Sand and gravel are widely used commodities in the road-construction industry. Photo taken during the 1995 Mineral Industries and the Environment—North teachers workshop.

TABLE 21. — 1994 Ohio sand and gravel sales, by county and type

County	Tons sold															
	Total sand and gravel	Total sand	Total gravel	Building		Portland cement concrete		Asphaltic concrete		Road construction/ resurfacing		Filtration		Foundry sand	Other/ unspecified	
				Sand	Gravel	Sand	Gravel	Sand	Gravel	Sand	Gravel	Sand	Gravel		Sand	Gravel
Allen	45,197	30,548	14,649		1,137											152
Ashland	398,267	198,364	199,903	25,222	23,966										38,494	40,450
Ashtabula	198,485	120,016	78,469	13,007	33,384	40,000									53,419	39,437
Athens	166,488	110,214	56,274	17,608	14,719	21,022		28,048	18,431	24,618	11,567				18,918	11,557
Auglaize	326,132	201,464	124,668	143,018		2,013	102,720								56,433	21,948
Belmont	221,724	154,757	66,967													
Butler	5,552,042	2,461,219	3,090,823	168,849	449,617	47,270	24,044	81,000	37,941	17,802	1,847,339	4,982		8,685	670,232	
Carroll	340,158	258,071	82,087												605,449	45,266
Champaign	505,871	116,801	389,070	4,891	69,898										223,855	45,266
Clark	2,116,418	739,492	1,376,926	44,678	74,045	216,358	276,897	204,700	239,596	269,246	498,922			38,966	214,203	
Clermont	167,293	97,581	69,712												4,510	287,466
Columbiana	80,533	42,441	38,092		224	6,487	99	3,641	4,889	2,294	4,889			97,581	69,712	
Coshocton	381,404	258,577	122,827	13,450	5,941	30,798	29,003	83,924	22,111	56,862	54,736	336		30,019	32,880	
Crawford	1,084	542	542											73,543	10,700	
Darke	48,817	23,967	24,850											542	542	
Defiance	16,436	0	16,436											23,967	24,850	
Erie	3,029	3,029	0										338	2,691		
Fairfield	656,487	357,988	298,499	25,782	267,124	191,535		94,847	19,200	7,950		34,800		3,074	12,175	
Franklin	4,459,933	2,132,266	2,327,667	363,570	850,198	808,278	160,345	456,789	575,043	453,129	691,581			50,500	50,500	
Fulton	173,958	173,958	0	168,821										5,137		
Gallia	129,585	9,629	119,956											9,629	119,956	
Geauga	536,962	352,105	184,857	75,340	15,773	153,118		19,280	35,036	11,683	5,370	7,216	99,023	85,468	64,691	
Greene	2,869,228	1,080,824	1,788,404	78,483	406,897	107,943		45,397		495,946	851,942			353,055	364,248	
Hamilton	5,220,397	2,417,303	2,803,094	687,520	976,379	108,383	61,339	228,533	107,114	956,001	1,466,386	1,836	5,370	435,030	186,506	
Hardin	250	0	250												250	
Henry	173,572	156,215	17,357													
Hocking	85,569	43,069	42,500													
Holmes	289,287	128,166	161,121	3,071	45,604	50,515	54,529	55,831		2,257	25,527	23,888		43,069	42,500	
Huron	266,810	227,239	39,571	3,311	19,145	188,465		21,691			7,291	5,565		16,492	11,573	
Jefferson	46	23	23											8,207	13,135	
Knox	973,987	363,041	610,946	60,885	190,256	177,431	99,393	39,364	60,831	3,500	73,522	1,300	3,000	23	23	
Lake	30,750	23,575	7,175	900	7,000	17,500								80,561	183,944	
Lawrence	69,295	69,295	0											5,175	175	
Licking	957,724	345,963	611,761	201,568	485,323	22,531	29,625	70,600	21,290	26,240	52,240	26,160		69,295	23,283	
Logan	253,296	186,700	66,596	19,357		72,817								68,366	66,596	
Lorain	14,915	11,615	3,300	11,615	3,300											
Lucas	300,550	300,550	0	262,989		37,044		39,489						517	23,072	
Madison	104,177	40,361	63,816		40,744									872		
Mahoning	69,974	38,897	31,077	19,448	15,539											
Marion	84,841	66,744	18,097	29,986	500	34,536	839							29	16,158	
Medina	1,312,567	741,818	570,749	205,894	196,581			265,791	1,248	248,540	372,920			21,593	10,057	
Meigs	640,200	363,372	276,828	35,381	132,427			317,934	109,941			19,449	15,538	10,057	10,057	
Miami	788,595	292,722	495,873	53,782	147,766					161,871	232,935			77,069	115,172	
Monroe	7,080	3,541	3,539											3,541	3,539	
Montgomery	2,128,806	688,221	1,440,585	47,259	66,214	174,853	220,469	92,535	165,757	197,956	292,955	13,298		175,618	681,892	

Morgan	255,499	178,849	76,650	35,769	15,328	35,770	15,330	35,770	15,329	35,770	15,331	35,770	15,332	15,331	72	9,438
Morrow	131,045	33,887	97,158	29,015	48,089						27,179		12,452	27,179	56,000	56,574
Muskingum	384,357	215,158	169,199	13,624	18,329	48,067	10,540	95,722	34,984	336	47,739	336	1,033	47,739	47,382	48,407
Pickaway	193,840	89,443	104,397	636	7,443		13,424	38,530	31,539	2,491	3,584	208,889		3,584	39,541	39,543
Pike	496,862	248,430	248,432													
Portage	4,387,187	3,008,410	1,378,777	749,118	539,722	765,665	62,263	419,585	242,785	210,085	147,808	210,085	1,456	147,808	863,957	384,743
Preble	370,780	97,340	273,440	38,920	81,729	18,061	54,059	9,030	27,027	27,089	108,126	27,089	181	108,126	3,115	2,318
Richland	557,560	125,292	432,268	84,760	353,633			7,221	7,220	24,552	59,967	24,552	2,500	59,967	8,759	8,948
Ross	726,476	332,885	393,591	153,175	87,126			49,181	49,110	12,518	78,824	12,518		78,824	118,011	178,531
Scioto	821,878	634,631	187,247	80,466	34,690					554,165	152,557			152,557		
Shelby	547,979	306,220	241,764	8,270	8,270	117,479	118,445	40,000	40,000	66,290		66,290			74,181	75,049
Stark	3,541,616	1,589,768	1,951,848	40,618	44,210	253,837	121,063	186,488	236,538	228,771	507,080	228,771		507,080	880,054	1,042,957
Summit	560,570	326,691	233,879	154,411	114,182	65,628	3,000			374	9,289		1,270	9,289	106,278	106,138
Trumbull	439,218	379,710	59,508	100,308	47,606	85,447		148,604		11,145	11,902			11,902	34,206	
Tuscarawas	1,832,736	865,915	966,821	298,870	337,550	76,486	71,662	98,333	95,401	289,985	341,450		39,639	341,450	102,066	81,119
Warren	1,728,634	708,590	1,020,044	60,145	185,725				816	248,436	389,166			389,166	400,009	444,337
Washington	182,793	110,542	72,251	38,298	22,030			6,977		26,500	24,794			24,794	38,767	25,427
Wayne	284,583	137,040	147,543	18,607	121,114	6,000	6,000	5,000	3,608	40,266					67,167	16,821
Williams	497,022	373,553	123,469		36,078	95,387		95,387							87,391	87,391
Wood	1,037	809	228												809	228
Wyandot	298,075	145,750	152,325	62,653	14,407	72,114	113,685			6,783	10,240		12,250	10,240	215	1,743
Lake Erie	165,353	156,541	8,812	24,304	8,812	8,759		46,234		77,244						
TOTAL	51,573,324	25,497,737	26,075,587	4,777,652	6,665,774	4,205,417	1,828,650	3,818,165	2,296,524	6,670,402	8,916,528	513	299,559	8,916,528	5,752,453	6,068,552

TABLE 22. — 1994 Ohio Lake Erie
sand and gravel production

Area	Production ¹	
	Cubic yards	Short tons
Lake Erie		
Fairport	97,953	132,237
Vermilion-Lorain Inner	24,530	33,116
Vermilion-Lorain Outer		
TOTAL	122,483	165,353

¹Production reported in cubic yards; converted to tons in the ratio of 1 cubic yard equals 1.35 short tons.

SANDSTONE AND CONGLOMERATE

Sandstone and conglomerate were sold or produced by 22 companies at 31 operations in 18 Ohio counties during 1994. Sales totalled 1,819,421 tons (-5.9 percent from 1993); Geauga, Perry, Knox, Tuscarawas, and Lake Counties accounted for 85.6 percent of that total. Crushed sandstone and conglomerate accounted for 1,789,609 tons of the total sales, and dimension stone accounted for 29,812 tons. Reported known production of sandstone and conglomerate was 2,015,612 tons in 1994. Ohio ranks 11th nationally in production of all dimension stone out of 35 producing states, but ranks first in the production of sandstone dimension stone. The top five states, in descending order of total dimension-stone production, are Georgia, Indiana,

Massachusetts, Wisconsin, and Vermont.⁹ National standings for crushed stone are included with Limestone and Dolomite.

The total value¹⁰ of sandstone and conglomerate sold in 1994 was \$32,773,396. Average price per ton was \$17.80 for crushed stone and \$31.59 for dimension stone.

An annual average of 139 employees worked an average of 104 days in 1994 to produce sandstone and conglomerate. Total wages of \$7,208,119 were paid to a total of 223 employees (139 production employees and 84 nonproduction employees). The average annual wage, based on those employees for whom wages were reported, was \$32,323. An additional 60 people (46 production employees and 14 nonproduction employees) were employed by operations mining sandstone and conglomerate along with one or more other mineral commodities.

Crushed stone was used primarily for glass sand, construction, foundry sand, and silica flour. Dimension stone was used primarily for rough construction purposes.

⁹Preliminary information from U.S. Bureau of Mines.

¹⁰Includes reported and estimated values. See footnote 1, p.7.

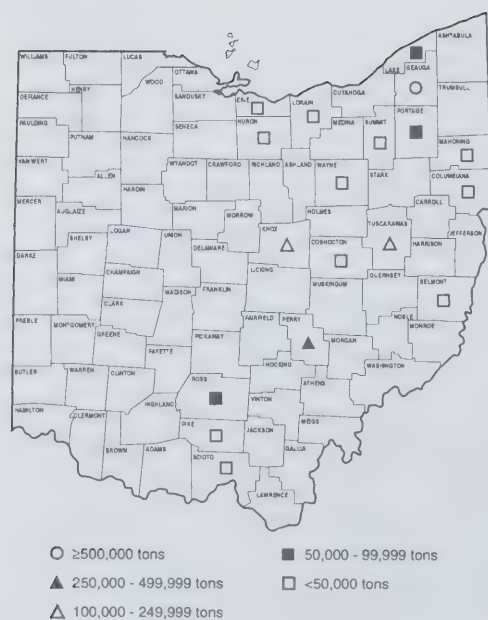


FIGURE 10.—Sales of sandstone and conglomerate in Ohio in 1994, by county.

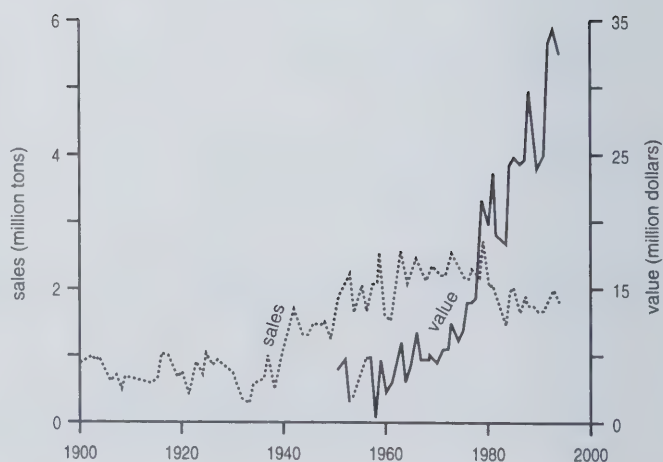


FIGURE 11.—Sales and value of sandstone and conglomerate. Value line dashed where data not available.

TABLE 23. — 1994 Ohio sales of crushed sandstone and conglomerate, by county and type

County	Tons sold													
	Total	Foundry sand	Glass sand	Metallurgical pebble	Refractory	Riprap	Aggregate	Silica flour	Polishing/grinding sand	Fire and furnace sand	Engine sand	Frac sand	Construction	Other/unspecified
Belmont	7,404					7,404								
Columbiana	980													980
Geauga	870,997	116,853	167,034	40,912	12,000		104,500		36,170	12,000	16,000	10,045	59,339	296,144
Huron	19,988					19,988								
Knox	149,363	20,914	76,264					43,473			4,423	4,017		272
Lake	70,749												70,749	
Mahoning	1,414													1,414
Perry	363,056	12,909	226,372					93,926						29,849
Pike	37,301	12,575	49	16,855			504							7,318
Portage	53,006													53,006
Ross	62,375	36,247	9,721		242						6,170		20	9,975
Summit	2,356						2,356							
Tuscarawas	103,213					8,463				6,626			82,988	5,136
Wayne	47,407													47,407
TOTAL	1,789,609	199,498	479,440	57,767	12,242	38,211	105,004	137,399	36,170	18,626	26,593	14,062	213,096	451,501

TABLE 24. — 1994 Ohio sales of dimension sandstone and conglomerate, by county and type

County	Tons sold									
	Total	Refractory	Rough construction	Rubble	Grindstones	Rough architectural	Finished	Curbing	Flagging	Other/unspecified
Coshocton	21,942		21,942							
Erie	517		253			78	186			
Lorain	1,306		594			194	518			
Scioto	5,900		5,900							
Summit	147									147
TOTAL	29,812	0	28,689	0	0	272	704	0	0	147



Overview of the sandstone processing operation of R. W. Sidley, Inc., in Thompson, Geauga County. The Pennsylvanian-age Sharon conglomerate is mined here for a variety of uses. Photo taken during the 1995 Mineral Industries and the Environment—North teachers workshop.

CLAY

Clay was sold or produced by 49 companies at 60 operations in 30 Ohio counties during 1994. Clay sales (including material for captive use) totalled 1,835,690 tons (+7.3 percent from 1993); Tuscarawas, Stark, Coshocton, Paulding, and Ottawa Counties accounted for 70.3 percent of the total sales. Ohio ranks seventh nationally in the production of clay and shale out of 44 producing states. The

¹¹Preliminary information from U.S. Bureau of Mines.

¹²Includes reported and estimated values. See footnote 1, p. 7.

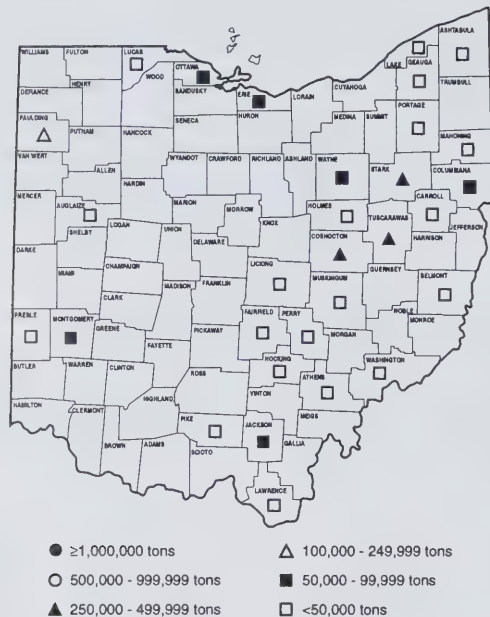


FIGURE 12.—Clay sales in Ohio in 1994, by county.

TABLE 25. — 1994 Ohio clay sales, by county and type

County	Tons sold								
	Total	Common clay products	Glazed ware	Vitrified products	Cement manufacture	Refractories	Construction	Landfill use	Other/unspecified
Ashtabula	453						453		
Athens	5,840								5,840
Auglaize	5,336	3,045							2,291
Belmont	197						197		
Carroll	1,581					1,581			
Columbiana	58,277	41,680				16,597			
Coshocton	279,709	3,444					219,840		56,425
Erie	81,200								81,200
Fairfield	165								165
Geauga	562								562
Hocking	25,004	24,850					154		
Holmes	31,912	31,912							
Jackson	66,304	64,893							1,411
Lake	3,328							3,328	
Lawrence	5,658	3,837				1,821			
Licking	14,730						14,730		
Lucas	8,072						888		
Mahoning	5,276						5,276		7,184
Montgomery	63,054	63,054							
Muskingum	36,911	36,911							
Ottawa	90,000						90,000		
Paulding	135,349				135,349				
Perry	39,484	39,484							
Pike	26,339						20,000		6,339
Portage	7,999						275		7,724
Preble	680								680
Stark	350,819	33,608		1,556				235,655	80,000
Tuscarawas	434,066	304,674		36,666		16,836	75,890		
Washington	4,052	4,052							
Wayne	53,333	53,333							
TOTAL	1,835,690	708,777	0	38,222	135,349	36,835	427,703	238,983	249,821

top five states, in descending order of production, are Georgia, Alabama, Wyoming, North Carolina, and Texas.¹¹ Reported known production of clay was 1,880,540 tons. The total value¹² of clay sold (including material for captive use) in 1994 was \$8,643,483. Average price per ton was \$4.71.

An annual average of 59 employees worked an average of 115 days in 1994 mining clay. Total wages of \$1,422,648 were paid to a total of 78 employees (59 production employees and 19 nonproduction employees). The average annual wage, based on those employees for whom wages were reported, was \$18,239. An additional 258 people (218 production employees and 40 nonproduction employees) were employed by operations mining clay along with one or more other mineral commodities.

Clay mined in Ohio in 1994 was largely for captive use in production of common clay products, construction, captive use in the landfill industry, and for cement manufacture.

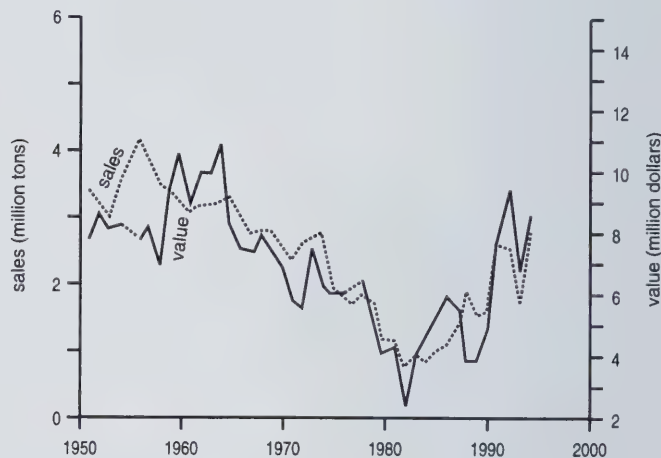


FIGURE 13.—Sales and value of clay in Ohio. Value line dashed where data not available.

SHALE

Shale was sold or produced by 27 companies at 37 operations in 20 Ohio counties during 1994. Shale sales (including material for captive use) totalled 3,135,729 tons (+140.9 percent from 1993); Stark, Tuscarawas, Cuyahoga, Marion, and Mahoning Counties accounted for 90.0 percent of the total sales. Reported known production of shale was 3,135,734 tons. National standings for shale production are included with Clay. The total value¹³ of shale sold (including material for captive use) in 1994 was \$8,123,123.

¹³Includes reported and estimated values. See footnote 1, p. 7.

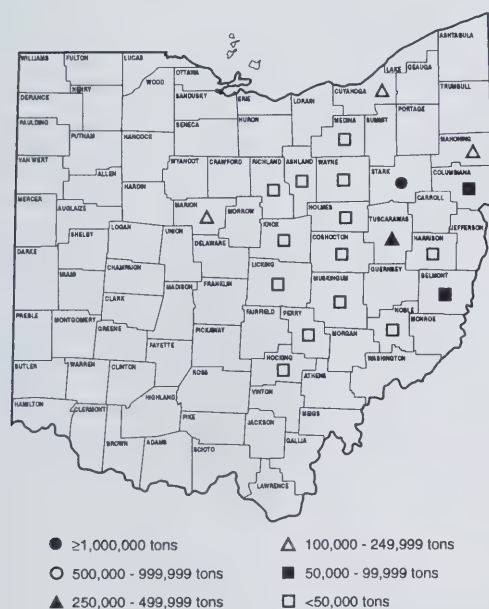


FIGURE 14.—Shale sales in Ohio in 1994, by county.

Average price per ton was \$2.59.

An annual average of 42 employees worked an average of 103 days in 1994 mining shale. Total wages of \$818,447 were paid to a total of 56 employees (42 production employees and 14 nonproduction employees). The average annual wage, based on those employees for whom wages were reported, was \$14,615. An additional 194 people (164 production employees and 30 nonproduction employees) were employed by operations mining shale along with one or more other mineral commodities.

Shale mined in Ohio in 1994 was largely for captive use in the landfill industry, production of common clay products, for lightweight aggregate, and for cement manufacture.

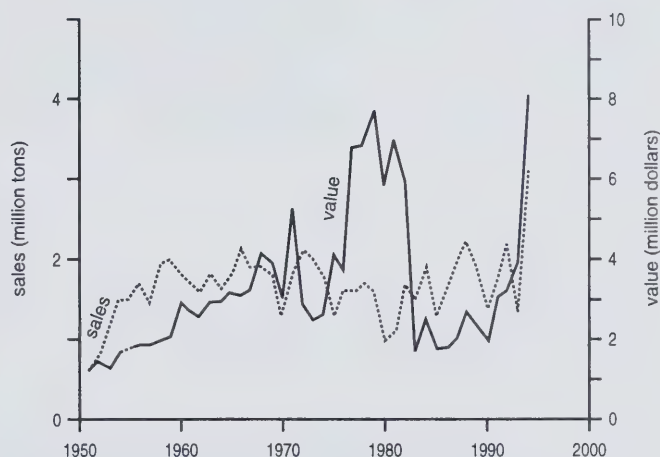


FIGURE 15.—Sales and value of shale in Ohio. Value line dashed where data not available.

TABLE 26. — 1994 Ohio shale sales, by county and type

County	Tons sold							
	Total	Common clay products	Vitrified products	Cement manufacture	Lightweight aggregate	Construction	Landfill use	Other/unspecified
Ashland	1,368	1,368						
Belmont	67,785					67,785		
Columbiana	83,241	47,717				7,524		28,000
Coshocton	10,763	10,763						
Cuyahoga	240,211				240,211			
Harrison	26,222		26,222					
Hocking	12,834	12,834						
Holmes	2,402	2,402						
Knox	3,648					3,648		
Licking	13,884		13,884					
Mahoning	122,452			122,452				
Marion	152,681	152,681						
Medina	18,194	18,194						
Muskingum	11,091	5,106	5,985					
Noble	275	275						
Perry	8,800	8,800						
Richland	10,000	10,000						
Stark	1,967,246						1,967,246	
Tuscarawas	339,123	329,383	6,648					3,092
Wayne	43,509	37,925				4,380		1,204
TOTAL	3,135,729	637,448	52,739	122,452	240,211	83,337	1,967,246	32,296

SALT

Salt was produced by 3 companies at 5 operations in 5 Ohio counties during 1994. Total tons of salt sold in 1994 amounted to 4,445,918 tons (+24.8 percent from 1993). Rock salt sales totalled 3,735,836 tons from 2 underground mines, one each in Cuyahoga and Lake Counties. Three brining operations, one each in Licking, Summit, and Wayne Counties, sold a total of 16,543 tons of salt in brine and 693,539 tons of evaporated salt. Reported known production of salt was 4,324,976 tons in 1994. Ohio ranks second nationally in the production of salt out of 14 producing states. The top five states, in descending order of production, are New York, Ohio, Louisiana, Michigan, and Kansas.¹⁴

The total value¹⁵ of the salt sold in 1994 was \$75,109,758. Average price per ton of rock salt was \$17.39 and of salt in brine and evaporated salt was \$14.29.

An annual average of 177 employees worked an average of 322 days in 1994 to produce salt. Total wages of \$17,045,798 were paid to a total of 377 employees (177 production employees and 200 nonproduction employees). The average annual wage, based on those employees for whom wages were reported, was \$45,214. The primary use for Ohio salt was ice control. Salt also was used as an additive in animal feed, for cattle blocks, and as a commercial and residential water-softening agent.

¹⁴Preliminary information from U.S. Bureau of Mines.

¹⁵Includes reported and estimated values. See footnote 1, p. 7.

¹⁶Includes estimated values only. See footnote 1, p. 7.

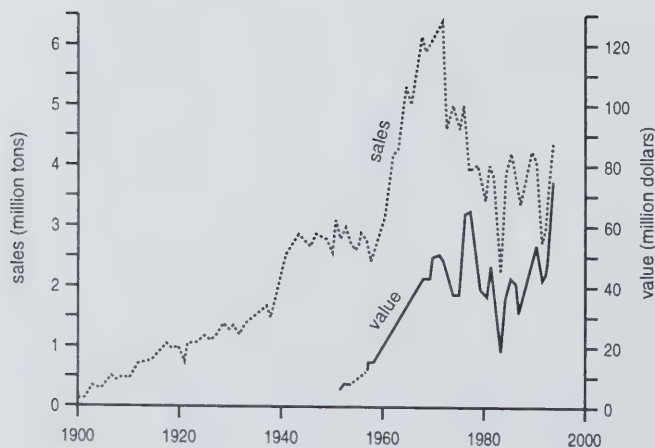


FIGURE 16.—Sales and value of salt in Ohio. Value line dashed where data not available.

GYPSUM

Gypsum was produced by 1 company at 1 operation in Ottawa County during 1994. Gypsum production and sales (all material was for captive use) totalled 259,105 tons (+11.1 percent from 1993). The reported value¹⁶ of the gypsum sold was \$2,461,499. Average price per ton was \$9.50. Ohio ranks 14th nationally in the production of gypsum out of 19 producing states. The top five states, in descending order of production, are Oklahoma, Iowa, Texas, Michigan, and Nevada.¹⁴

An annual average of 13 employees worked 341 days in 1994 producing gypsum. Total wages of \$667,749 were paid to a total of 15 employees (13 production employees and 2 nonproduction employees). The average annual wage in 1994 was \$44,517. The sole use of gypsum from this operation is for the manufacture of wallboard.

PEAT

Peat was produced by 4 companies at 4 operations in 3 Ohio counties during 1994. Peat sales (including material for captive use) totalled 7,035 tons (-60.6 percent from 1993). Champaign, Portage, and Williams Counties accounted for 100 percent of the total sales. The total value of the peat sold in 1994 was \$49,812. Average price per ton was \$7.08. Reported known production was 9,446 tons. Ohio ranks 12th nationally in the production of peat out of 21 producing states. The top five states, in descending order of production, are Michigan, Florida, Minnesota, Illinois, and Wisconsin.¹⁴

Most peat operations in Ohio are owner operated. Therefore, employment information is not available.

Peat produced in Ohio was used primarily for mulch, soil mix, and worm culture.

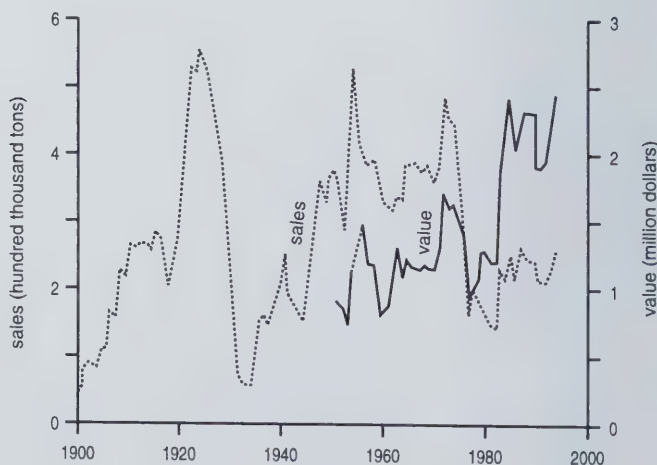


FIGURE 17.—Sales and value of gypsum in Ohio. Value line dashed where data not available. Some figures were calculated because actual figures were not reported in order to maintain confidentiality.



FIGURE 18.—Sales and value of peat in Ohio.

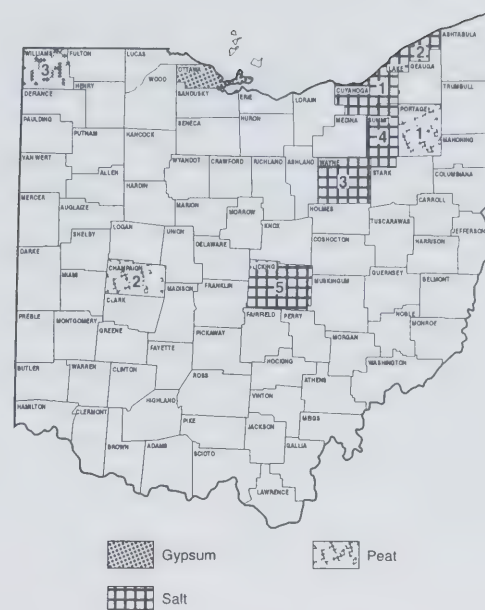


FIGURE 19.—Counties producing salt, gypsum, and peat in Ohio in 1994, and their ranking in sales.



Teachers put in protective ear plugs before observing the crusher at the Celotex Corporation gypsum operation in Gypsum, Ottawa County. The gypsum is crushed into smaller pieces for the manufacture of wallboard. Photo taken during the 1995 Mineral Industries and the Environment—North teachers workshop.

OIL AND GAS

This information is summarized from M. P. McCormac, 1995, 1994 Ohio Department of Natural Resources, Division of Oil and Gas Annual Report

The Division of Oil and Gas issued 996 drilling permits for oil and gas in 1994; the Division estimates that 765 wells were actually drilled in 1994. This is the third year in a row and only the eighth time since 1888 that fewer than 1,000 wells were drilled annually in Ohio. Wells were drilled in 44 of Ohio's 88 counties. The top five counties in number of new wells drilled in 1994 were Muskingum, Washington, Coshoc-ton, Holmes, and Wayne. The Division of Oil and Gas received 660 well completion reports; 510 wells were productive and 150 were dry holes for a completion rate of 77.3 percent.

The total reported crude oil production in Ohio in 1994 was 8,757,872 barrels, a 5.7 percent increase from 1993. Through 1994, Ohio wells have produced 1,036,925,322 barrels of crude oil. The dollar value of crude oil produced

in Ohio in 1994 was \$136,258,819, a decrease of 4.7 percent. Average price per barrel in 1994 was \$15.59, a 9.7 percent decrease from the 1993 price.

Natural gas production in Ohio in 1994 was 130,855,248 MCF, a 3.7 percent decrease from 1993. This production figure includes an estimated 1,295,596 MCF of gas used on the lease. The dollar value of natural gas produced in Ohio in 1994 was \$317,728,937, a decrease of 4.8 percent from 1993. The value of the estimated volume of gas used on the lease was not used in computing this value. The average price per MCF in 1994 was \$2.45, a 1.2 percent decrease from 1993.

The combined total value of Ohio oil and gas production in 1994 was \$453,987,756, a decrease of 4.8 percent from 1993 and the lowest market value since 1978.

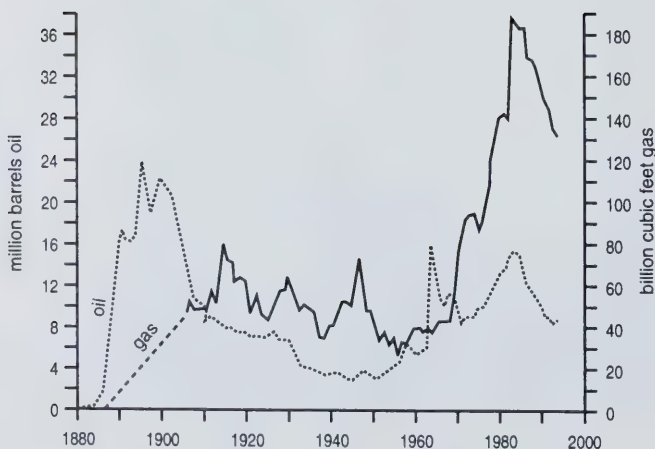


FIGURE 20.—Production of oil and gas in Ohio.

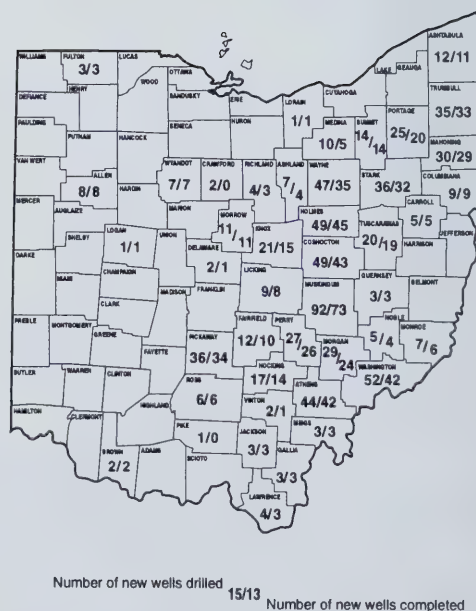


FIGURE 21.—New wells drilled for oil and gas in 1994, by county.

TABLE 27. — 1994 Ohio summary of new oil and gas well completions by county

County ^{1,2}	Development wells		Exploratory wells		Total wells	Percent productive	Drilled footage		
	Productive	Dry	Productive	Dry			Productive	Dry	Total
Allen	8	0	0	0	8	100.00	11,086	0	11,086
Ashland	3	0	0	1	4	75.00	2,017	4,316	6,333
Ashtabula	10	0	0	1	11	90.91	36,035	5,851	41,886
Athens	40	2	0	0	42	95.24	168,212	6,376	174,588
Brown	0	0	0	2	2	0.00	0	3,444	3,444
Carroll	5	0	0	0	5	100.00	26,797	0	26,797
Columbiana	8	1	0	0	9	88.89	44,093	802	44,895
Coshocton	27	4	4	8	43	72.09	159,985	70,485	230,470
Delaware	1	0	0	0	1	100.00	3,095	0	3,095
Fairfield	2	3	3	2	10	50.00	19,722	20,499	40,221
Fulton	1	0	2	0	3	100.00	1,462	0	1,462
Gallia	1	0	2	0	3	100.00	5,090	0	5,090
Guernsey	2	0	0	1	3	66.67	10,631	7,418	18,049
Hocking	9	3	2	0	14	78.57	45,514	12,466	57,980
Holmes	24	10	5	5	44	65.91	162,302	93,951	256,253
Jackson	1	0	1	1	3	66.67	5,532	2,904	8,436
Knox	10	1	1	3	15	73.33	36,080	19,977	56,057
Lawrence	3	0	0	0	3	100.00	4,743	0	4,743
Licking	4	0	2	2	8	75.00	11,544	8,585	20,129
Logan	0	0	0	1	1	0.00	0	2,001	2,001
Lorain	1	0	0	0	1	100.00	253	0	253
Mahoning	29	0	0	0	29	100.00	165,570	0	165,570
Medina	3	1	0	1	5	60.00	7,438	11,505	18,943
Meigs	3	0	0	0	3	100.00	13,532	0	13,532
Monroe	6	0	0	0	6	100.00	14,633	0	14,633
Morgan	23	0	1	0	24	100.00	90,822	0	90,822
Morrow	3	8	0	0	11	27.27	10,523	27,778	38,301
Muskingum	39	6	14	14	73	72.60	272,540	121,448	393,988
Noble	4	0	0	0	4	100.00	18,399	0	18,399
Perry	15	2	4	5	26	73.08	90,002	34,537	124,539
Pickaway	6	3	10	15	34	47.06	44,617	50,477	95,094
Portage	15	4	0	1	20	75.00	103,250	39,101	142,351
Richland	0	2	1	0	3	33.33	4,507	7,344	11,851
Ross	0	0	0	6	6	0.00	0	18,823	18,823
Stark	25	0	2	5	32	84.38	129,574	35,424	164,998
Summit	14	0	0	0	14	100.00	55,862	0	55,862
Trumbull	32	1	0	0	33	96.97	153,971	4,707	158,678
Tuscarawas	9	3	2	5	19	57.89	76,969	58,047	135,016
Vinton	0	0	1	0	1	100.00	4,894	0	4,894
Washington	39	2	1	0	42	95.24	187,159	5,350	192,509
Wayne	21	5	3	6	35	68.57	129,788	67,429	197,217
Wyandot	1	3	2	1	7	42.86	6,133	10,067	16,200
TOTAL	447	64	63	86	660	77.27	2,334,376	751,112	3,085,488

¹No wells were drilled in the following counties in 1994: Adams, Auglaize, Belmont, Butler, Champaign, Clark, Clermont, Clinton, Cuyahoga, Darke, Defiance, Erie, Fayette, Franklin, Greene, Geauga, Hamilton, Hancock, Hardin, Harrison, Henry, Highland, Huron, Jefferson, Lake, Lucas, Madison, Marion, Mercer, Miami, Montgomery, Ottawa, Paulding, Preble, Putnam, Sandusky, Scioto, Seneca, Shelby, Union, Van Wert, Warren, Williams, and Wood.

²No well completion information was reported for the following counties in 1994: Crawford, Pike.

TABLE 28. — 1994 Ohio summary of new oil and gas well completions by producing zone

Producing zone	No. of producing wells	No. of dry holes	Total no. of wells	Total footage	Percent productive
Pennsylvanian undifferentiated	17	2	19	18,923	89.47
Upper Mississippian undifferentiated	2	0	2	2,200	100.00
Lower Mississippian "1st & 2nd Berea"	18	2	20	20,687	90.00
Devonian					
Ohio Shale	12	0	12	23,789	100.00
Oriskany	13	1	14	61,289	92.86
Silurian "Clinton-Medina"	265	4	269	1,272,986	98.51
Lower Ordovician					
Trenton-Gull River	11	0	11	18,707	100.00
Beekmantown	20	1	21	133,069	95.24
Cambrian-Ordovician Rose Run	127	102	229	1,235,373	55.46
Cambrian					
Trempealeau	25	33	58	273,804	43.10
Kerbel-Mt. Simon	0	4	4	18,737	0.00
Precambrian	0	1	1	5,924	0.00
TOTAL	510	150	660	3,085,488	77.27

TABLE 29. — Ohio counties¹ and their state mine number abbreviations²

County	Abbreviation	County	Abbreviation	County	Abbreviation
Adams	Ads	Hamilton	Hmn	Noble	Ne
Allen	An	Hancock	Hk	Ottawa	Oa
Ashland	Ald	Hardin	Hdn	Paulding	Pg
Ashtabula	Asa	Harrison	Hn	Perry	Py
Athens	As	Henry	Hy	Pickaway	Pky
Auglaize	Ae	Highland	Hd	Pike	Pke
Belmont	Bt	Hocking	Hg	Portage	Pe
Brown	Bn	Holmes	Hs	Preble	Pre
Butler	Br	Huron	Hrn	Putnam	Pm
Carroll	Cl	Jackson	Jkn	Richland	Rd
Champaign	Cpn	Jefferson	Jfn	Ross	Rs
Clark	Ck	Knox	Kx	Sandusky	Sy
Clermont	Ct	Lake	Lke	Scioto	So
Clinton	Cln	Lawrence	Le	Seneca	Sa
Columbiana	Ca	Licking	Lg	Shelby	Shy
Coshocton	Cn	Logan	Lgn	Stark	Sk
Crawford	Cd	Lorain	Ln	Summit	St
Cuyahoga	Cya	Lucas	Ls	Trumbull	Tl
Darke	Dke	Madison	Mdn	Tuscarawas	Ts
Defiance	De	Mahoning	Mg	Union	Un
Delaware	Del	Marion	Mn	Van Wert	Vt
Erie	Ee	Medina	Ma	Vinton	Vn
Fairfield	Fd	Meigs	Ms	Warren	Wan
Fayette	Fe	Mercer	Mr	Washington	Wn
Franklin	Fn	Miami	Mi	Wayne	We
Fulton	Ftn	Monroe	Me	Williams	Ws
Gallia	Ga	Montgomery	My	Wood	Wd
Geauga	Gea	Morgan	Mon	Wyandot	Wt
Greene	Ge	Morrow	Mw		
Guernsey	Gy	Muskingum	Mum		

¹Brown County reported no production or sales of mineral commodities in 1994.²As used for Division of Mines mine numbers.

1994 OHIO ALPHABETICAL DIRECTORY OF PRODUCING COAL-MINE OPERATORS

For those mines for which the Division of Mines has not assigned a state mine number, a letter designation is used (example: Bt-C).
The designation (u) following the map-location number indicates an underground mine.

Name, address, telephone number, and president/owner/manager of company	Name of mine (and map location number)	County	1994 production (tons)	State mine number	Division of Reclamation permit number
Addington, Inc. 9431 U.S. Rte. 60 Ashland, KY 41102-9527 703-889-6114 Michael Quillen, pres.	Dundas Job (602)	Vinton	523,516	Vn-191	D-0197, D-0867, D-0957, D-1004
American Landfill, Inc. 7916 Chapel St. SE Waynesburg, OH 44688 216-856-8800 Scott Porter, pres.	American Landfill, Inc. (631)	Stark	19,364	Sk-246	IM-1114, D-1090
Anthony Mining Co., Inc. P.O. Box 1298 Steubenville, OH 43952 614-765-4185 Joseph J. Sperlazza, pres.	Maine #307 (190) Omatis (756) <i>Total mines: 2</i>	Jefferson Jefferson	8,772 33,132 <i>Total tons: 41,904</i>	Jfn-789 Jfn-A	D-0307 D-1063
Avis Coal Co. P.O. Box 3373 Zanesville, OH 43702-3373 614-454-2583 James F. Graham, pres.	Avis Coal Co. (663)	Perry	216,955	Py-A	D-0931
B & N Coal, Inc. P.O. Box 100 Dexter City, OH 45727 614-783-3575 Carl Baker Jr., pres.	Shevlin (495) Ullman (514) Pourhouse (626) Lee (627) Shilling (493) Estadt (760) Flint (761) <i>Total mines: 7</i>	Noble Noble Noble Noble Noble, Washington Noble Noble	4,563 109,557 396,177 78,510 91,566 71,940 24,920 <i>Total tons: 777,233</i>	Ne-150 Ne-151 Ne-154 Ne-155 Ne-1008 Ne-BN Ne-BN1	D-0787 D-0807 D-0900 D-0958 D-0706 D-1038 D-1032
Belden Brick Co. P.O. Box 20910 Canton, OH 44701 216-852-2424 William H. Belden, Jr., pres.	Moomaw Pit (667) Belden Pit (261) Wallick Pit (720) Shanesville Pit (634) <i>Total mines: 4</i>	Tuscarawas Tuscarawas Tuscarawas Tuscarawas	11,277 1,289 6,771 1,722 <i>Total tons: 21,059</i>	Ts-1517 Ts-1646 Ts-1841 Ts-1939	IM-46 IM-44 IM-45 IM-47
Belville Mining Co., Inc. P.O. Box 834 Ironton, OH 45638 614-643-2331 Robert E. Belville, pres.	Brady Creek (491) Davis Strip (759) <i>Total mines: 2</i>	Lawrence Lawrence	2,215 16,580 <i>Total tons: 18,795</i>	Le-B Le-BM	IM-1188, D-0746 D-1057, D-1073
Benedict, Inc. P.O. Box 315 McArthur, OH 45651 614-596-5226 W. E. Engle, pres.	Mitchell Hollow (357) Waldron Pit (419) Allied West (420) Austin Pit (423) <i>Total mines: 4</i>	Vinton Vinton Vinton Vinton	133,836 90,834 167,815 42,511 <i>Total tons: 434,996</i>	Vn-172 Vn-183 Vn-184 Vn-187	D-0445 D-0633 D-0609 D-0672
Black Stone Mining Co. 574 Stillwater Dr. Dennison, OH 44621 614-922-6786 Kenneth D. McBeth, owner	Sapp (189)	Jefferson	130,058	Jfn-830	D-0983
Boich Mining Co. P.O. Box 148 Bloomingdale, OH 43910 614-282-2116 Abe Bryan, pres.	Betsy Mine (178)	Jefferson	213,956	Jfn-528	D-0247, D-0563, D-0803, D-0873
Buckeye-Industrial Mining Co. P.O. Box 389 Lisbon, OH 44432 216-337-9511 John C. Grisham, pres.	Lafferty (733) Mountain Spring Coal Co. (529) (u) Witherow (474) Mountain Spring Coal Co. #14 (529) (u) Mountain Spring Coal Co. #6 (529) (u) West Point (647) West Point #5 (647) (u) Simballa et al. (738) Grim (687) Cable (666) <i>Total mines: 10</i>	Carroll, Columbiana Columbiana Columbiana Columbiana Columbiana Columbiana Columbiana Columbiana Columbiana Stark	237,450 11,833 704 191,371 48,622 4,841 53,801 114,741 7,164 91,361 <i>Total tons: 761,888</i>	Ca-1000 Ca-349 Ca-965 Ca-994 Ca-978 Ca-987 Ca-991 Ca-999 Ca-BI Sk-249	D-1055 D-0874 D-0591 D-0874 D-0874 D-0928 D-0928 D-1074 D-0994 D-0960

1994 OHIO ALPHABETICAL DIRECTORY OF PRODUCING COAL-MINE OPERATORS — Continued

Name, address, telephone number, and president/owner/manager of company	Name of mine (and map location number)	County	1994 production (tons)	State mine number	Division of Reclamation permit number
Buckingham Mining & Reclamation, Inc. P.O. Box 31 Shawnee, OH 43782-0031 614-394-2644 Richard McClelland, pres.	Roger's Hollow (629) Graham (762) Imler (763) Blosser Mine (665) <i>Total mines: 4</i>	Perry Perry Perry Perry <i>Total tons:</i>	4,615 9,760 3,310 26,796 44,481	Py-B Py-BM1 Py-BM2 Py-BMR	D-0940 D-1089 D-1093 D-0980, D-1014, D-1050
C & E Coal, Inc. Rte. 2 Box 177 Toronto, OH 43964 614-537-1498 Amos L. Rawson, pres.	Applegate (646)	Columbiana	98,320	Ca-986	D-0975
C L A Coal Co. 4412 Pleasant Valley Rd. SE Dennison, OH 44621 614-922-3954 Cynthia McCartney, pres.	Berresford (649)	Guernsey	8,315	Gy-C	D-0910
Cedar Heights Clay Co. Div. of Resco Products, Inc. P.O. Box 295 Oak Hill, OH 45656-0295 614-682-7794 W. T. Tredennick, pres.	Cedarloo/Jenkins/Greer (705) Katie Walke (706) Sadler (754) <i>Total mines: 3</i>	Jackson Jackson Jackson <i>Total tons:</i>	1,454 4,100 513 6,067	Jkn-1007 Jkn-CH Jkn-CH1	IM-24, D-0813 IM-1060 IM-1182
Central Ohio Coal Co. P.O. Box 98 Cumberland, OH 43732 614-962-2013 Gary Dimmerling, gen. mgr.	Muskingum Mine (228)	Morgan, Muskingum, Noble	1,318,703	Ne-41	D-0056, D-0127, D-0261, D-0274, D-0455, D-0559, D-0678, D-0820, D-0839, D-1034, IM-921
Commercial Minerals, Inc. 10900 South Ave. P.O. Box 217 North Lima, OH 44452-0217 216-549-2165 W. T. Mackall, pres.	Buckeye Rd. (736) Ketchum North (737) Ketchum East (688) <i>Total mines: 3</i>	Columbiana Columbiana Columbiana <i>Total tons:</i>	4,494 21,870 64,950 91,314	Ca-997 Ca-998 Ca-CM	D-1051 D-1068 D-0950, D-0999
Consolidation Coal Co. Eastern Region Cadiz, OH 43907 614-942-4335 Samuel Shrader, sr. v. pres., mining	Mahoning Valley #36 (150)	Harrison	798,285	Hn-700	D-0051, D-0054, D-0334, D-0414, D-0452, D-0784, D-0826
Costain Coal, Inc. P.O. Box 729 Gnadenhutten, OH 44629 614-254-4395 Peter J. Hill, pres.	Anco (534) Costain Coal, Inc. (256) <i>Total mines: 2</i>	Guernsey Tuscarawas <i>Total tons:</i>	43,427 257,036 300,463	Gy-310 Ts-115	D-1065 D-0190, D-0217, D-0398, D-0533, D-0715, D-0986
Cravat Coal Co. 40580 Cadiz-Piedmont Rd. Cadiz, OH 43907 614-942-4656 Michael Puskarich, pres.	Rice Pit (681) Fairpoint Pit (682) Rock Hill Pit (727) <i>Total mines: 3</i>	Belmont Belmont Belmont <i>Total tons:</i>	43,011 11,639 41,335 95,985	Bt-1201 Bt-1202 Bt-CCC	D-1020 D-0483 D-1080
Crooksville Coal Co., Inc. P.O. Box 149 Crooksville, OH 43731 614-982-6651 Ralph L. Allen, pres.	Crooksville Strip (239)	Perry	43,141	Py-317	D-0057, D-0085, D-0189, D-0615, D-0875
D. & D. Mining Co. 3379 E. Garfield Rd. New Springfield, OH 44443 216-549-3127 Donald Thompson, pres.	Saviers Mine (441)	Columbiana	39,678	Ca-348	IM-976, D-1002
D & L Contractors, Inc. P.O. Box 446 Flushing, OH 43977 614-968-4913 Walter Dombroski, pres.	D & L Strip (185) NW Piney Fork (708) <i>Total mines: 2</i>	Jefferson Jefferson <i>Total tons:</i>	7,732 36,351 44,083	Jfn-780 Jfn-829	D-0126 D-1006
Daron Coal Co., Inc. 3296 Pleasant Valley Rd. SE Dennison, OH 44621 614-922-6829 Ronald Selway, pres.	Pleasant Valley Mine (433) Reed Mine (671) Peach Pit (766) <i>Total mines: 3</i>	Tuscarawas Tuscarawas Tuscarawas <i>Total tons:</i>	83,789 84,253 12,992 181,034	Ts-1991 Ts-DC Ts-DCC	D-0702 D-0954 D-1075
Double "R" Mining 1054 Blackhawk Rd. Beaver Falls, PA 15010 412-847-0970 Raymond L. Barker, pres.	Burt Strip (528)	Columbiana	2,203	Ca-985	D-0821

1994 OHIO ALPHABETICAL DIRECTORY OF PRODUCING COAL-MINE OPERATORS — Continued

Name, address, telephone number, and president/owner/manager of company	Name of mine (and map location number)	County	1994 production (tons)	State mine number	Division of Reclamation permit number
ENZ, Inc. 3497 University Dr. NE New Philadelphia, OH 44663 216-339-5313 James R. Demuth, pres.	Sickafoose-Pickens Pit (246)	Stark	132,569	Sk-208	D-0295, D-0827, D-1005, D-1015
R. A. Eberts Co., Inc. P.O. Box 109 Jackson, OH 45640 614-286-2975 Phil A. Bowman, pres.	Carr Ridge Pit (564) Green Pit (418) <i>Total mines: 2</i>	Jackson, Vinton Vinton <i>Total tons:</i>	215,972 54,897 270,869	Vn-192 Vn-182	D-0207, D-1016 D-0631
Elk Coal, Inc. P.O. Box 165 McArthur, OH 45651 614-596-2132 John L. Cline, pres.	Elk Strip (675)	Vinton	630	Vn-194	D-0973
F. & M. Coal Co. Costonia Rd. Box 171 Toronto, OH 43964 614-544-5203 Edward Fiala, owner	F. & M. Strip (186)	Jefferson	23,633	Jfn-784	D-0091, D-0728
Fairpoint Coal Co. P.O. Box 158 Fairpoint, OH 43927 614-695-3174 Dennis Zaccagnini, pres.	Pogue Run (19)	Belmont	11,876	Bt-927	D-0483
John Glenn Mining Co. 6556 State Route 45 Lisbon, OH 44432 216-424-5612 John Glenn, pres.	Bailey Mine (689)	Columbiana	903	Ca-JG	D-1008
Green Basin Coal, Inc. Route 1, Box 49C Strasburg, OH 44680 216-878-7740 Jerry K. Kohl, pres.	Blackhawk (668)	Tuscarawas	16,383	Ts-2024	IM-1087
Harrison Mining Corp. P.O. Box 176 Cadiz, OH 43907 614-942-8220 John A. McNab, pres.	Nelms Mine-Cadiz Portal (580) (u)	Harrison	965,232	Hn-710	D-0426
Holmes Limestone Co. P.O. Box 295 Berlin, OH 44610 216-893-2721 Merle Mullet, pres.	Miley (740) Byesville (745) 241 Plant (161) 557-Roman School (538) Berlin (753) Bolivar Mine (363) Charm-Wright (719) Stone Creek (601) James (673) Clark-Reynolds (670) Slurry Pit (680) Dennison (674) <i>Total mines: 12</i>	Coshocton Guernsey Holmes Holmes Holmes Stark Stark Tuscarawas Tuscarawas Tuscarawas Tuscarawas Tuscarawas <i>Total tons:</i>	682 10,650 15,320 123,289 9,358 11,676 84,187 164,465 181,691 19,737 995 117,732 739,782	Cn-H1 Gy-327 Hs-67 Hs-97 Hs-HLC1 Sk-235 Sk-HLC Ts-2023 Ts-2038 Ts-2045 Ts-HC Ts-HLC	D-1094 D-1088 IM-3, IM-768 D-0775, D-0885, D-1039 D-1092 IM-945, D-0865 D-0987, D-1053 D-0796 D-0965 D-1001 D-0981 D-0969
J. C. Coal Co., Inc. P.O. Box 426 Junction City, OH 43748 614-342-4226 Ralph L. Allen, pres.	Rendville Strip (717)	Perry	27,861	Py-JC	D-1048
Joyce Coal Co., Inc. P.O. Box 264 St. Clairsville, OH 43950 614-782-1330 Andy Massimino, pres.	Blaine Pit (524) Nemo (656) Salt Run (757) <i>Total mines: 3</i>	Belmont Jefferson Jefferson <i>Total tons:</i>	2,163 14,753 68,562 85,478	Bt-1184 Jfn-821 Jfn-JC	D-0799 D-0937 D-1067
K. C. C. I. P.O. Box 24 Morristown, OH 43759 614-782-1087 George Krulock, pres.	Susie Mine (519) Shepherdstown (728) <i>Total mines: 2</i>	Belmont Belmont <i>Total tons:</i>	60,422 7,932 68,354	Bt-1179 Bt-K	D-0840 D-1052

1994 OHIO ALPHABETICAL DIRECTORY OF PRODUCING COAL-MINE OPERATORS — Continued

Name, address, telephone number, and president/owner/manager of company	Name of mine (and map location number)	County	1994 production (tons)	State mine number	Division of Reclamation permit number
Kimble Clay & Limestone Co. Rte. 1 Box 386 Dover, OH 44622 216-343-1226 Floyd E. Kimble, owner	Kimble Clay & Limestone Co. (262) Kimble Clay & Limestone Co. (598) Kimble Clay & Limestone Co. (600) Kimble Clay & Limestone Co. (638) <i>Total mines: 4</i>	Tuscarawas Tuscarawas Tuscarawas Tuscarawas	14,940 206,340 83,531 94,706 <i>Total tons: 399,517</i>	Ts-1727 Ts-2019 Ts-2022 Ts-2037	IM-9 D-0852 D-0878 D-0921
L & M Mineral Co. 5205 State Rte. 39 Millersburg, OH 44654 216-893-2227 John E. Ling, Jr., pres.	Luikert (267) Spring (411) <i>Total mines: 2</i>	Tuscarawas Tuscarawas	48,002 9,389 <i>Total tons: 57,391</i>	Ts-1914 Ts-1982	D-0701 IM-621
Red Malcuit, Inc. 707 S. Wooster Ave. P.O. Box 166 Strasburg, OH 44680-0166 216-878-7212 Mark A. Malcuit, pres.	RMI #3 (556) RMI #2 (510) <i>Total mines: 2</i>	Tuscarawas Tuscarawas	36,823 57,654 <i>Total tons: 94,477</i>	Ts-2006 Ts-2007	D-0800 D-0737
Mardis Coal Co. 31352 Haessly Rd. Hanoverton, OH 44423 216-853-7857 Rick S. Wheatley, Jr., owner	Jarvis (739)	Columbiana	2,486	Ca-MC	D-1069
Marietta Coal Co. 67705 Friends Church Rd. St. Clairsville, OH 43950 614-695-2197 George Nicolozakes, pres.	Vannest-Moore et al. (570) Barack-Henthorne et al. (38) Seabright-Bigley et al. (39) Consol (42) Oliver-Clark et al. (58) Baltimore Coal-Presutti (424) Denham-Albaugh et al. (452) Porterfield-Harrison Leasing et al. (523) AT & T (604) Spiga (729) Dyrdek-Poe et al. (730) <i>Total mines: 11</i>	Belmont Belmont Belmont Belmont Belmont Belmont Belmont Belmont Belmont Belmont	59,677 100,136 28,308 18,263 52,394 10,250 39,899 28,028 48,110 55,785 95,004 <i>Total tons: 535,854</i>	Bt-771 Bt-1104 Bt-1105 Bt-1109 Bt-1129 Bt-1150 Bt-1164 Bt-1183 Bt-AT Bt-M1 Bt-M2	D-0771 D-0088 D-0333, D-0734 D-0270, D-0780 D-0491 D-0478, D-0597, D-0823 D-0742 D-0845 D-0922 D-1036 D-1029
Miller Mining, Inc. P.O. Box 525 Sugarcreek, OH 44681 216-852-4511 Olen Miller, pres.	Geiger (734) Beachy (752) Wasteland Management (704) Beachy-Gerber (703) Mast-Miller et al. (559) Miller (635) Spooky Hollow (721) Wilmar Farms-Marine (725) General Clay-Scarr et al. (637) Shrock-Stony Point (767) Putt-Turner et al. (768) <i>Total mines: 11</i>	Carroll Holmes Holmes Holmes Tuscarawas Tuscarawas Tuscarawas Tuscarawas Tuscarawas Tuscarawas Tuscarawas	14,409 47,642 69,074 48,374 35,297 9,323 3,034 100,239 197,992 23,911 33,427 <i>Total tons: 582,722</i>	Cl-514 Hs-524 Hs-525 Hs-M Ts-2010 Ts-2027 Ts-2035 Ts-2039 Ts-GC Ts-MM2 Ts-MM3	D-1081 D-1072 D-1044 D-1021 D-0849 D-0948 D-1010 D-1023 D-0962, D-0967 D-1077 D-1085
Myers Mining P.O. Box 218 Carrollton, OH 44615 216-739-2009 James L. Myers, owner	Harlem Mine #4 (686) Germano Mine-East (746) <i>Total mines: 2</i>	Carroll Harrison	33,479 22,105 <i>Total tons: 55,584</i>	Cl-HM1 Hn-757	D-1035 D-1054
Northshore Coal, Inc. 100 W. Main St. St. Clairsville, OH 43950 614-695-7237 Charles F. Dawson, pres.	Buckeyeville #7 (648) Whitaker (744) <i>Total mines: 2</i>	Guernsey Guernsey	54,910 11,367 <i>Total tons: 66,277</i>	Gy-315 Gy-324	D-0951 D-0748
Ohio River Collieries, Inc. P.O. Box 128 Bannock, OH 43972 614-968-3504 Tony Gentile, pres.	7400 Pit (27)	Belmont	4,479	Bt-1074	D-0340
Ohio Valley Coal Co. 56854 Pleasant Ridge Rd. Alledonia, OH 43902 216-765-1240 Robert E. Murray, pres.	Powhatan #6 (3) (u)	Belmont	4,531,093	Bt-68	D-0360
Oldtown Coal Co. 4412 Pleasant Valley Rd. SE Dennison, OH 44621 614-922-3942 Mary J. Brown, pres.	Ferris #1 (735)	Columbiana	720	Ca-350	D-1078

1994 OHIO ALPHABETICAL DIRECTORY OF PRODUCING COAL-MINE OPERATORS – Continued

Name, address, telephone number, and president/owner/manager of company	Name of mine (and map location number)	County	1994 production (tons)	State mine number	Division of Reclamation permit number
Oxford Mining Co., Inc. 1811 Cambridge Rd. P.O. Box 427 Coshocton, OH 43812 614-623-0015 Charles C. Ungurean, pres.	Shurtz (616) Hinds (741) Adamsville (716) Z-MACK (764) <i>Total mines: 4</i>	Coshocton Coshocton Muskingum Perry <i>Total tons:</i>	150,856 31,963 236,297 95,385 514,501	Cn-OX Cn-OX1 Mum-O Py-O	D-0964 D-1064 D-1030 D-1086
Penn Eagle Coal Corp. P.O. Box 151 Wellsburg, WV 26070 304-737-0696 Anthony K. Worthley, v. pres.	Salt Run Mine (181) B & S Mine (659) <i>Total mines: 2</i>	Jefferson Jefferson <i>Total tons:</i>	7,916 659 8,575	Jfn-831 Jfn-PE	D-0843 IM-1162
Quarto Mining Co. Subsidiary of Consolidation Coal Co. 1029 Market St. Clarington, OH 43915 614-458-2016 Ben Statler, v. pres.	Powhatan #4 (215) (u)	Monroe	3,142,743	Me-4	D-0433
R & F Coal Co. 538 North Main St. Cadiz, OH 43907 614-942-9269 Doug Poush, pres.	Vcelka (391) Bethesda (456) American Legion (522) Dudek (568) Miklovic (684) Egypt Valley West (731) Watson-Huhn (314) Bartolec II (691) Porcher Area (532) Wolf-Isleta (577) Isleta Central (692) Pollock (693) Broken Aro (742) Noble (743) Harrah West (581) Branson Ridge (699) Hartley 519 (750) Friendship Park (658) Friendship II-Jeffco (711) Hamlin-Hines et al. (723) <i>Total mines: 20</i>	Belmont Belmont Belmont Belmont Belmont Belmont Belmont, Guernsey Coshocton Coshocton Coshocton Coshocton Coshocton Coshocton Coshocton Coshocton Coshocton Coshocton Coshocton Harrison Harrison Harrison Jefferson Jefferson Tuscarawas <i>Total tons:</i>	66,982 45,787 67,946 349,222 99,163 240,937 74,782 181,609 31,856 129,167 307,063 52,897 205,755 39,545 19,241 304,190 114,213 8,065 238,987 35,862 2,613,269	Bt-948 Bt-1168 Bt-1182 Bt-1188 Bt-M Bt-RF2 Gy-304 Cn-P Cn-PA Cn-RF Cn-RF1 Cn-RF2 Cn-RF3 Cn-WL Hn-748 Hn-754 Hn-RF1 Jfn-824 Jfn-J Ts-2043	D-0762 D-0619 D-0854 D-0908 D-1009 D-1062 D-0262 D-1027 D-0850 D-0689 D-1012 D-0691 D-1071 D-1060 D-0797 D-0829 D-1076 D-0564 D-0995 D-1047
R & R Minerals, Inc. 7360 Skyview Rd. Millersburg, OH 44654 216-674-4926 Gary R. Ross, pres.	Fresno-McCleary (695)	Coshocton	18,165	Cn-841	D-1033
R. T. G., Inc. P.O. Box 250 Byesville, OH 43723 614-439-4399 James E. Rossiter, pres.	R. T. G. #7 (618) R. T. G. #8 (697) <i>Total mines: 2</i>	Guernsey Guernsey <i>Total tons:</i>	53,154 8,554 61,708	Gy-313 Gy-319	D-0907 D-0989
Rash Energy, Inc. 3114 U.S. Route 62 Dundee, OH 44624 216-359-5909 Freeman Mullet, pres.	Rash Energy, Inc. (676)	Wayne	3,543	We-26	IM-690, IM-1210
S. & D. Construction Corp. R.R. #1 Box 34A Irondale, OH 43932 614-544-5005 Richard Petrozzi, pres.	Pipo #51 (712)	Jefferson	64,575	Jfn-SD	D-0677
Sands Hill Coal Co., Inc. 1203 N. Pennsylvania Ave. Wellston, OH 45692 614-384-5659 Jack Huffman, pres.	Walton (651) Sands Hill Strip #5 (623) Bethel Ridge (755) Sands Hill Strip #4 (541) Sands Hill Strip #3 (513) <i>Total mines: 5</i>	Jackson Jackson Jackson Jackson, Vinton Vinton <i>Total tons:</i>	7,911 383,146 72,070 124,060 353,520 940,707	Jkn-1066 Jkn-1069 Jkn-S1 Jkn-SH Vn-S	D-0808 D-0944 D-1031 D-0861, IM-1068 D-0793
Melvin Schaney 47134 Giacobbi Rd. Jewett, OH 43986 614-937-2515 Melvin Schaney, owner	Melvin Schaney (748)	Harrison	17,466	Hn-759	D-1037

1994 OHIO ALPHABETICAL DIRECTORY OF PRODUCING COAL-MINE OPERATORS — Continued

Name, address, telephone number, and president/owner/manager of company	Name of mine (and map location number)	County	1994 production (tons)	State mine number	Division of Reclamation permit number
Schiappa Coal Co., Inc. P.O. Box 728 Steubenville, OH 43952 614-282-5301 Teresa C. Schiappa, pres.	Rose Valley (326)	Harrison	35,867	Hn-222	D-0587
Solomon's Mines, Inc. 7732 Salem-Unity Rd. Salem, OH 44460 216-337-0123 Jack Solomon, pres.	Solomon's Mines, Inc. (660)	Mahoning	1,194	Mg-632	IM-808
Southern Ohio Coal Co. P.O. Box 490 Athens, OH 45701 614-286-5051 Jim Tompkins, gen. mgr.	Meigs Mine #31 (212, 300) (u) Meigs Mine #2 (213) (u) <i>Total mines: 2</i>	Meigs, Vinton Meigs <i>Total tons:</i>	2,021,708 2,288,041 4,309,749	Ms-293 Ms-294	D-0354, D-0463 D-0355
Sterling Mining Co. 10900 South Ave. P.O. Box 217 North Lima, OH 44452 216-549-2165 W. Thomas MacKall, pres.	Sterling North (657) (u) Sterling South (758) <i>Total mines: 2</i>	Jefferson Jefferson <i>Total tons:</i>	359,993 412 360,405	Jfn-823 Jfn-ST	D-0949 D-1019
Stewart Coal Co. Lake Alma Rd. P.O. Box 408 Wellston, OH 45692 614-286-4696 William F. Stewart, pres.	Dark Hollow (652)	Jackson	160,081	Jkn-1070	D-0997
Sunnydale Mining 88740 Fairview Rd. Jewett, OH 43986 614-946-4291 Robert Stewart, owner	Tipton (747) Dodds (749) <i>Total mines: 2</i>	Harrison Harrison <i>Total tons:</i>	12,068 1,956 14,024	Hn-758 Hn-761	D-1058 D-1082, D-1097
Thompson Bros. Mining Co. 3379 E. Garfield Rd. New Springfield, OH 44443 216-549-3979 J. E. Thompson, pres.	Peres Mine (205)	Mahoning	17,247	Mg-65	D-0374
Toronto A & L Coal, Inc. R.D. #2, Box 177 Toronto, OH 43964 614-537-1498 Amos L. Rawson, pres.	James Tunnel Hill (636)	Tuscarawas	55,978	Ts-2040	D-0935
Valley Mining, Inc. 4412 Pleasant Valley Rd. SE Dennison, OH 44621 614-922-3942 Mary J. Brown, pres.	Egypt Valley (732) Snyder-Bush (696) Smith (582) Greentown (401) York (489) Kurtz (714) Crim (555) Taylor (669) <i>Total mines: 8</i>	Belmont Guernsey Harrison Jefferson Jefferson Jefferson Tuscarawas Tuscarawas <i>Total tons:</i>	124,082 76,580 44,793 13,101 10,034 63,891 23,188 23,507 379,176	Bt-VM Gy-318 Hn-750 Jfn-807 Jfn-813 Jfn-833 Ts-2005 Ts-2034	D-1059 D-1025 D-0901 D-0642 D-0740 D-1049 D-0769 D-0516
Varkony Mining Co. P.O. Box 427 Hopedale, OH 43976 614-937-2777 Stephen & John Varkony, Jr., owners	Varkony Mining Co. (146)	Harrison	44,037	Hn-217	D-0440
W. B. Coal Co., Inc. R.D. 1 Box 40 Bloomingdale, OH 43910 614-282-6503 Wayne Boich, pres.	McGinness Bros. Strip (144) McGinness Bros. #3 (701) McGinness Bros. #4 (751) <i>Total mines: 3</i>	Harrison Harrison Harrison <i>Total tons:</i>	44,779 40,311 56,906 141,996	Hn-738 Hn-756 Hn-WB	D-0376 D-1045 D-1046
Waste Management of Ohio, Inc. dba Countywide RDF 3619 Gracemont St. SW East Sparta, OH 44626 216-874-3855 Greg A. Terwilliger, mgr.	Countywide RDF (248)	Stark	52,892	Sk-217	IM-750, D-0938

1994 OHIO ALPHABETICAL DIRECTORY OF PRODUCING COAL-MINE OPERATORS – Continued

Name, address, telephone number, and president/owner/manager of company	Name of mine (and map location number)	County	1994 production (tons)	State mine number	Division of Reclamation permit number
Waterloo Coal Co., Inc. P.O. Box 626 Jackson, OH 45640 614-682-7787 Phil A. Bowman, v. pres.	Bowman Strip (165)	Jackson	676,135	Jkn-367	D-0205, D-0594, D-0892, D-0968, D-1083
Weirton Construction Co. 401 Pennsylvania Ave. Weirton, WV 26062 304-748-1400 Donald R. Donell, pres.	#19 (180)	Jefferson	20,531	Jfn-687	D-0404, D-0939
Frank Widmor Coal Co. P.O. Box 176 Blaine, OH 43909 614-635-4811 Frank Widmor, owner	Frank Widmor Coal Co. (603)	Belmont	37,198	Bt-1190	IM-1089, D-1061
Winfield Clay 3068 Stone Creek Rd. Stone Creek, OH 43840 216-339-5452 David A. Miller, owner	Winfield Clay (765)	Tuscarawas	687	Ts-2047	IM-1224

1994 OHIO DIRECTORY OF COAL-PREPARATION PLANTS AND ASSOCIATED FACILITIES, BY COUNTY

For those mines for which the Division of Mines has not assigned a state mine number, a letter designation is used (example: Bt-C).

County	Name, address, telephone number, and president/owner/manager of company	Name of plant (and map location number for coal-preparation plants)	Township	State mine number	Division of Reclamation permit number	Type of facility
Belmont	Consolidation Coal Co. Eastern Region Cadiz, OH 43907 614-942-4335 Samuel Shrader, sr. v. pres., mining	General Services 105	Wheeling	Hn-5		general services
	Cravat Coal Co. 40580 Cadiz-Piedmont Rd. Cadiz, OH 43907 614-942-4656 Michael Puskarich, pres.	Bellaire River Dock Holloway Tipple	Pultney Flushing	Bt-876 Bt-963	D-0687 D-0763	loading dock tipple
	Marietta Coal Co. 67705 Friends Church Rd. St. Clairsville, OH 43950 614-695-2197 George Nicolozakes, pres.	Marietta Coal Co. (3)	Pultney	Bt-936	D-0216	loading dock, prep plant — jig, flotation, centrifugal dryer, crushers, screens
	Ohio River Collieries, Inc. P.O. Box 128 Bannock, OH 43972 614-968-3504 Tony Gentile, pres.	Lafferty Tipple Lafferty Truck Shop	Union Union	Bt-947 Bt-1093	D-0773 D-0773	tipple shop
	Ohio Valley Coal Co. 56854 Pleasant Ridge Rd. Alledonia, OH 43902 216-765-1240 Robert E. Murray, pres.	Powhatan #6 (4)	Smith, Washington	Bt-68	D-0360	prep plant — jigs, cyclones, centrifuges, thickeners, filters, screens
	Ohio Valley Transloading Co. 56854 Pleasant Ridge Rd. Alledonia, OH 43902 216-765-1240 Robert E. Murray, pres.	Harbour Facility	York	Bt-1198		dock
	R & F Coal Co. 538 North Main St. Cadiz, OH 43907 614-942-9269 Doug Poush, pres.	Bellaire River Dock	City of Bellaire	Bt-832	D-0838	dock
	Rayle River Coal 67705 Friends Church Rd. St. Clairsville, OH 43950 614-695-2197 George Nicolozakes, pres.	Rayle River Terminal	Pultney	Bt-1191		coal transfer facility
Carroll	James Bros. Coal Co. 190 S. Main St. P.O. Box 425 Magnolia, OH 44643 216-866-9388 Kermit & Richard James, Jr., partners	James Bros. Tipple	Rose	Cl-17	D-0705	tipple
Columbiana	Buckeye-Industrial Mining Co. P.O. Box 389 Lisbon, OH 44432 216-337-9511 John C. Grisham, pres.	Kensington Preparation Plant (5) Gavers Preparation Plant (29)	West Wayne	Ca-879 Ca-932	D-0806 D-0532	prep plant — heavy-media washer, cyclone, centrifuges, breaker prep plant — Jeffrey jig system
	C & E Coal, Inc. Route 2 Box 177 Toronto, OH 43964 614-537-1498 Amos L. Rawson, pres.	C & E Coal, Inc. (6)	Madison	Ca-892	D-0599	tipple, prep plant — crushers, screens
	State Line Resources, Inc. Route 154 Negley, OH 44441 216-426-2728 Charles H. Muse, Jr., pres.	State Line Resources, Inc. (33)	Middleton	Ca-505	D-0223	prep plant — crushers, cyclones, screens

**1994 OHIO DIRECTORY OF COAL-PREPARATION PLANTS AND
ASSOCIATED FACILITIES, BY COUNTY – Continued**

County	Name, address, telephone number, and president/owner/manager of company	Name of plant (and map location number for coal-preparation plants)	Township	State mine number	Division of Reclamation permit number	Type of facility
Coshocton	Conesville Coal Preparation Co. 14561 Twp. Rd. 263 Conesville, OH 43811 614-687-3209 H. D. Leppla, gen. mgr.	Conesville Coal Preparation Co. (7)	Franklin	Cn-810		prep plant — jig, cyclones, froth cells, flotation, filter press, screens, dryers
	Oxford Mining Co. 2313 Cambridge Rd. P.O. Box 427 Coshocton, OH 43812 614-623-0015 Charles C. Ungurean, pres.	Lori Tipple	Franklin	Cn-736	D-0671	tipple
	R & F Coal Co. 538 North Main St. Cadiz, OH 43907 614-942-9269 Doug Poush, pres.	Barb Tipple	Franklin	Cn-748	D-0661	tipple
Gallia	Mack Energy Co. P.O. Box 148 Union Furnace, OH 43158-0148 614-385-8521 Michael B. McCort, pres.	Mack River Tipple	Clay	Ga-236		dock, tipple
	Sands Hill Coal Co., Inc. 1203 N. Pennsylvania Ave. Wellston, OH 45692 614-384-5659 Jack Huffman, pres.	Sands Hill Coal Co., Inc.	Addison	Ga-183	D-0834	tipple
	Waterloo Coal Co., Inc. P.O. Box 626 Jackson, OH 45640 614-682-7787 T.L. Darlington, Jr., pres.	Waterloo River Dock	Addison	Ga-229	D-0725	dock, tipple
Guernsey	Thompson Mining Co. 12321 Ideal Rd. Byesville, OH 43723 614-685-6726 George Thompson, pres.	Thompson Preparation Plant (34)	Jackson	Gy-320		prep plant — crusher
Harrison	Consolidation Coal Co. Eastern Region Cadiz, OH 43907 614-942-4335 Samuel Shrader, sr. v. pres., mining	Georgetown Preparation Plant (8)	Cadiz	Hn-212	D-0192	prep plant — jigs, flotation, cyclones, centrifuges, filters, crushers, breaker, screens, dryer, picking tables, magnets
	Cravat Coal Co. 40580 Cadiz-Piedmont Rd. Cadiz, OH 43907 614-942-4656 Michael Puskarich, pres.	22 Shop	Moorefield	Hn-230		shop
	Harrison Processing Corp. 86395 Mine Rd. P.O. Box 250 Hopedale, OH 43976 614-942-8220 John A. McNab, pres.	Nelms Prep Plant (30)	Green	Hn-169	D-0424	prep plant — heavy-media vessel, heavy-media cyclones, spirals, dryers, thickeners, crushers, screens
	R & F Coal Co. 538 North Main St. Cadiz, OH 43907 614-942-9269 Doug Poush, pres.	Cadiz Machine Shop Cadiz Lab	Cadiz Cadiz	Hn-709 Hn-709C		shop laboratory
Hocking	Mack Energy Co. P.O. Box 148 Union Furnace, OH 43158-0148 614-385-8521 Michael B. McCort, pres.	Mack Energy Tipple	Starr	Hg-M	D-0556	tipple
Jackson	Sands Hill Coal Co., Inc. 1203 N. Pennsylvania Ave. Wellston, OH 45692 614-384-5659 Jack Huffman, pres.	Sands Hill Prep Plant (9)	Milton	Jkn-1055	D-0347	prep plant — heavy-media cyclone, hydrocyclones, screens, dryer, crusher, picking table, magnets

**1994 OHIO DIRECTORY OF COAL-PREPARATION PLANTS AND
ASSOCIATED FACILITIES, BY COUNTY — Continued**

County	Name, address, telephone number, and president/owner/manager of company	Name of plant (and map location number for coal-preparation plants)	Township	State mine number	Division of Reclamation permit number	Type of facility
Jackson (con't)	Stewart Coal Co. Lake Alma Rd. Wellston, OH 45692 614-286-4696 William F. Stewart, pres.	Stewart Tipple	Milton	Jkn-S	D-0659	tipple
	Waterloo Coal Co., Inc. P.O. Box 626 Jackson, OH 45640 614-682-7787 T.L. Darlington, Jr., pres.	Bowman Strip (10)	Jefferson, Madison	Jkn-367	D-0285	prep plant — jig, crushers, breaker, screens, dryers, wash tables
Jefferson	Rayland Harbor P.O. Box 2388 Wintersville, OH 43952 614-264-7704 George Krulock, pres.	#40 Dock-Shop-Prep Plant (12)	Warren	Jfn-647	D-0492	dock, shop, prep plant — heavy-media washer, cyclones, crushers, breaker, screens, dryers
	W.B. Coal Co., Inc. R.D. 1 Box 40 Bloomingdale, OH 43910 614-282-6503 Wayne Boich, pres.	W.B. Tipple	Cross Creek, Wayne	Jfn-744	D-0665	tipple
Lawrence	Collins Mining Co. Rte. 2 Box 48 Ironton, OH 45638 614-532-9400 C. E. Collins, v. pres.	River Dock	Hamilton	Le-415	D-0777	dock
	Harbour Marine, Inc. P.O. Box 3126 Huntington, WV 25702-0126 703-935-7521 Dave Fortner, exec. v. pres.	Harbour Marine, Inc.	Union	Le-420	D-0662	tipple
	Ironton Coal Co., Inc. 9431 U.S. Rte. 60 Ashland, KY 41102-9527 703-889-6114 D.C. Fields, v. pres.	Ironton Coal Co., Inc.	Upper	Le-439		loading dock
Mahoning	East Fairfield Coal Co. 10900 South Ave. P.O. Box 217 North Lima, OH 44452-0217 216-549-2165 R. E. Mackall, pres.	Tipple Washing & Crushing Plant (13)	Beaver Beaver	Mg-621 Mg-623	D-0214	tipple prep plant — cyclones, centrifuges, thickener, filter, crushers, screens, magnets
	Thompson Bros. Mining Co. 3379 E. Garfield Rd. New Springfield, OH 44443 216-549-3979 J. E. Thompson, owner	Thompson Bros. Mining Co.	Springfield	Mg-588	D-0711	tipple
Meigs	Addington, Inc. 9431 U.S. Rte. 60 Ashland, KY 41102-9527 703-889-6114 Michael Quillen, pres.	Addington Dock #4	Salisbury	Ms-285	D-0698	tipple, dock
	Southern Ohio Coal Co. P.O. Box 490 Athens, OH 45701 614-286-5051 Jim Tompkins, gen. mgr.	Meigs Mine No. 31 (14)	Salem	Ms-293	D-0354	prep plant — heavy-media washers, flotation, cyclones, centrifuges, thickeners, filters, breaker, screens
Monroe	Quarto Mining Co. (subsidiary of Consolidation Coal Co.) 1029 Market St. Clarington, OH 43915 614-458-2016 Ben Statler, sr. v. pres.	Powhatan #4 (15)	Salem	Me-8	D-0422	prep plant — jigs, cyclones, centrifuges, thickeners, filters, crushers
Morgan	Central Ohio Coal Co. P.O. Box 98 Cumberland, OH 43732 614-962-2013 Gary Dimmerling, gen. mgr.	Muskingum Mine (16)	Meigsville	Ne-41	D-0378, D-0420	tipple, prep plant — jigs, flotation, cyclones, thickener, filters, crushers, breakers, screens, magnets

**1994 OHIO DIRECTORY OF COAL-PREPARATION PLANTS AND
ASSOCIATED FACILITIES, BY COUNTY – Continued**

County	Name, address, telephone number, and president/owner/manager of company	Name of plant (and map location number for coal-preparation plants)	Township	State mine number	Division of Reclamation permit number	Type of facility
Muskingum	Sands Mining Corp. 3445 Adamsville Rd. P.O. Box 2848 Zanesville, OH 43701 614-454-1483 Gene Sands, pres.	Sands Coal Washing (28)	Washington	Mum-239	D-0428	prep plant — jig, cyclones, crusher, flotation, conveyor
Perry	Crooksville Coal Co., Inc. P.O. Box 149 Crooksville, OH 43731 614-982-6651 Ralph L. Allen, pres.	Crooksville Preparation Plant (18)	Bearfield	Py-317	D-0248	prep plant — jig, flotation, centrifugal dryer, crushers, screens
		Crooksville Tipple	Salt Creek	Py-339	D-0692	tipple
	Nutter Bros. Coal Co., Inc. P.O. Box 190 New Lexington, OH 43766 614-394-2681 James P. Nutter, pres.	#1 Tipple	Coal	Py-NB	D-0716	tipple
Scioto	Norfolk Southern Railroad 914 Hayport Rd. Wheelersburg, OH 45694 614-574-8491 Charles G. Howard, asst. to mgr.	NS Wheelersburg Terminal	Porter	So-96		dock
Tuscarawas	Central Fuel Co. County Rd. 55 P.O. Box 165 New Philadelphia, OH 44663 216-339-5049 Keith B. Kimble, gen. mgr.	Central Fuel Co. (20)	York	Ts-1938	D-0264	prep plant — jig, screen, dryers
	Costain Coal, Inc. P.O. Box 729 Gnadenhutzen, OH 44629 614-254-4395 Peter J. Hill, pres.	Costain Coal, Inc. (19)	Clay, Salem	Ts-115	D-0199	prep plant — jig, flotation, cyclones, filters, crushers, screens
	Holmes Limestone Co. P.O. Box 295 Berlin, OH 44610 216-893-2721 Merle Mullet, pres.	Strasburg Wash Plant (21)	Franklin, Lawrence	Ts-1942	D-0287	prep plant — jigs, cyclones, centrifuges, crushers, screens, picking tables
		Slurry Wash Plant (32)	Franklin, Lawrence	Ts-HC	D-0981	prep plant — cyclones
	Miller Mining, Inc. P.O. Box 525 Sugarcreek, OH 44681 216-852-4511 Olen Miller, pres.	Copperhead Tipple	Sugar Creek, Wayne	Ts-MM	D-0652	tipple
		Barrs Mills Tipple	Sugar Creek	Ts-MM1	D-0876	tipple
Vinton	Addington, Inc. 9431 U.S. Rte. 60 Ashland, KY 41102-9527 703-889-6114 Michael Quillen, pres.	Addington, Inc. (23)	Clinton	Vn-178	D-0185	prep plant — washers, cyclones, jig, centrifugal dryer, thickener, Diester table, screens, filter, crusher, magnet
	Benedict, Inc. P.O. Box 315 McArthur, OH 45651 614-596-5226 W. E. Engle, pres.	Benedict, Inc. (22)	Swan	Vn-145	D-0159	prep plant — heavy-media washer, cyclone, crusher, conveyors
	Sands Hill Coal Co., Inc. 1203 N. Pennsylvania Ave. Wellston, OH 45692 614-384-5659 Jack Huffman, pres.	Sands Hill Tipple/ Preparation Plant (24)	Clinton	Vn-641	D-0309, D-0169	tipple, prep plant — heavy-media washers, flotation, cyclones, centrifuge, crushers, screens, dryer, picking tables, magnets
Wayne	Holmes Limestone Co. P.O. Box 295 Berlin, OH 44610 216-893-2721 Merle Mullet, pres.	Holmes Limestone Preparation Plant (27)	Franklin	Hs-79	D-0283	prep plant — jig, crushers, dryers, screens, conveyors

1994 OHIO DIRECTORY OF PRODUCING COAL-MINE OPERATORS, BY COUNTY

NOTE: This directory lists only the coal-producing operations. It does not list tipples, loading docks, preparation plants, or other active, nonproducing operations that would contribute to employment and wage statistics presented in tables 10-16. For those mines for which the Division of Mines has not assigned a state mine number, a letter designation is used (example: Bt-C). There is no correlation between the "Seam Number" column and the "Production Tonnage" column. The Seam Number column represents the seams mined at the operation. No production tonnage is listed by seam. Days in production were estimated for those companies not providing this information.

SEAM IDENTIFICATION

1 Sharon	4A Clarion	7 Upper Freeport	11 Waynesburg
2 Quakertown	5 Lower Kittanning	7A Mahoning	12 Washington
3 Lower Mercer	5A Strasburg	8 Pittsburgh	H Harlem
3A Upper Mercer	6 Middle Kittanning	8A Pomeroy-Redstone	W Winters
4 Brookville	6A Lower Freeport	9 Meigs Creek	

Name of company	Name of mine	Township	Seam		Type of mine	Production		Days in production in 1994	Disposition		Employment			State mine number
			Number	Thickness (inches)		Method	Tonnage		Method	Tonnage	Under-ground	Production	Non-production	
BELMONT COUNTY — Total production = 6,319,728 tons Cravat Coal Co.	Rock Hill Pit	Flushing	8,9		surface	strip	32,205	102	water truck	3,189		2	<1	Bt-CCC
						auger	9,130			38,146				
						Total	41,335			41,335				
Fairpoint Coal Co. Joyce Coal Co., Inc. K.C.C.I.	Fairpoint Pit Rice Pit	Richland Washington	8 8		surface	strip	11,639	77	truck	11,639		1	1	Bt-1202
						strip	43,011			28,989				
						Total				14,022				
	Pogue Run Blaine Susie Mine	Richland Richland Wheeling	8 8 8	72 52	surface	strip	11,876	30	truck	11,876		1	1	Bt-927
						strip	2,163			2,163				
						auger	52,030			60,422				
	Shepherdstown Seabright-Bigley et al.	Wheeling Colerain	9 11 12	48 28	surface	strip	7,932	30	truck	7,932		2		Bt-K Bt-1105
						strip	13,237			28,308				
						auger	15,071							
	AT&T	Kirkwood, Union	8		surface	strip	28,308	79	truck	48,110		25	25	Bt-AT ¹
						auger	29,351							
						Total	48,110							
	Baltimore Coal-Presutti	Pease, Pultney	11	29	surface	strip	6,346	18	truck	10,250				Bt-1150
						auger	3,904							
						Total	10,250							
	Vannest-Moore et al.	Richland	11		surface	strip	34,089	92	truck	59,677				Bt-771
						auger	25,588							
						Total	59,677							
	Barack-Henthorne et al.	Richland	11	36	surface	strip	75,353	128	truck	100,136				Bt-1104
						auger	24,783							
						Total	100,136							
	Oliver-Clark et al.	Richland	11	38	surface	strip	29,751	69	truck	52,394				Bt-1129
						auger	22,643							
						Total	52,394							
	Porterfield-Harrison Leasing et al.	Richland	11		surface	strip	5,618	35	truck	28,028				Bt-1183
						auger	22,410							
						Total	28,028							

Dyrdek-Poe et al.	Richland	9	surface	strip auger Total	47,771 47,233 95,004	108	truck	95,004				Bt-M2
Denham-Albaugh et al.	Smith	11	44 surface	strip auger Total	24,349 15,550 39,899	68	truck	39,899				Bt-1164
Consol	Union	8	51 surface	strip auger Total	15,374 2,889 18,263	26	truck	18,263				Bt-1109
Spiga	Union	9	surface	strip auger Total	27,553 28,232 55,785	37	truck	55,785				Bt-M1
7400 Pit	Union	9	48 surface	strip	4,479	48	water truck Total	4,479 1,582 6,061	1	<1		Bt-1074
Powhatan #6	Smith, Washington	8	62 slope	longwall cont. miner Total	3,494,746 1,036,347 4,531,093	294	rail truck Total	3,667,000 868,520 4,535,520	186	187		Bt-68
Miklovic	Flushing	9	surface	strip auger Total	84,422 14,741 99,163	232	water truck Total	24,633 74,072 98,705	8	1		Bt-M
Bethesda	Goshen, Wayne	9	35 surface	strip	45,787	117	truck	45,787	7	<1		Bt-1168
American Legion	Kirkwood	11 9	25 36 surface	strip	67,946	126	water truck Total	15,465 52,306 67,771	6	1		Bt-1182
Egypt Valley West	Kirkwood, Warren	9	surface	strip auger Total	232,657 8,250 240,937	211	water truck Total	46,128 198,366 244,494	23	3		Bt-RF2
Voelka	Union, Wheeling	9	30 surface	strip auger Total	50,047 16,935 66,982	233	water truck Total	12,742 55,162 67,904	5	1		Bt-948
Watson-Huhn	Warren	8 9	38 42 surface	strip auger Total	34,298 4,309 38,607	211	water truck Total	9,672 28,846 38,518	3	<1		Gy-304 ²
Dudek	Wheeling	9	surface	strip auger Total	331,285 17,937 349,222	319	water truck Total	83,493 265,873 349,366	31	4		Bt-1188
Egypt Valley	Kirkwood, Warren	9	36 surface	strip auger Total	122,166 1,916 124,082	192	truck	124,082	9	2		Bt-VM
Frank Widmor Coal Co.	Pultney	8 9	72 46 surface	strip auger Total	17,764 19,434 37,198	243	truck	37,198	1	2		Bt-1190
Valley Mining, Inc.	Kirkwood, Warren	9	36 surface	strip auger Total	122,166 1,916 124,082	192	truck	124,082	9	2		Bt-VM
Frank Widmor Coal Co.	Pultney	8 9	72 46 surface	strip auger Total	17,764 19,434 37,198	243	truck	37,198	1	2		Bt-1190
Buckeye-Industrial Mining Co. Miller Mining, Inc. Myers Mining	Lafferty Geiger Harlem Mine #4	7 7A 5,6,6A H	30 36 20 surface surface surface	strip strip strip	94,980 14,409 33,479	230 122 311	truck truck truck	94,980 14,409 33,479	8 1 3	1		Ca-1000 ³ Cl-514 Cl-HM1

CARROLL COUNTY — Total production = 142,868 tons

¹Employment reported for Bt-AT is a summary for all Marietta Coal Co. operations.²See also Guernsey County.³See also Columbiana County.

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OCT 31 1995
IL GEOL SURVEY

1994 OHIO DIRECTORY OF PRODUCING COAL-MINE OPERATORS, BY COUNTY - Continued

Name of company	Name of mine	Township	Seam		Type of mine	Production		Days in production in 1994	Disposition		Employment			State mine number
			Number	Thick-ness (inches)		Method	Tonnage		Method	Tonnage	Under-ground	Production	Non-produc-tion	
	COLUMBIANA COUNTY – Total production = 811,171 tons													
Buckeye-Industrial Mining Co.	Simballa et al.	Elk Run	7	50	surface	strip	114,741	250	truck	114,741	7		Ca-999	
	Grim	Franklin	7A	24	surface	strip	7,164	40	truck	7,164	2	1	Ca-BI	
	Mountain Spring Coal Co.	Madison	7	36	drift	cont. miner	11,833	23	truck	11,833		<1	Ca-349	
	West Point	Madison	7,7A	35	surface	strip	3,173	40	truck	4,841	2	1	Ca-987	
						auger	1,668							
						Total	4,841							
C & E Coal, Inc.	West Point #5	Madison	7	44	drift	cont. miner	53,801	113	truck	53,801		3	Ca-991	
	Mountain Spring Coal Co. #14	Madison	7	30	drift	cont. miner	191,371	172	truck	191,371		5	Ca-994	
	Lafferty	Washington	7	30	surface	strip	142,470	230	truck	142,470	8	1	Ca-10004	
	Witherow	Wayne	7A	36	surface	auger	704	10	truck	704	1	1	Ca-965	
C & E Coal, Inc.	Mountain Spring Coal Co. #6	Wayne	6A	40	drift	cont. miner	48,622	40	truck	48,622			Ca-978	
	Applegate	Wayne	6	44	surface	strip	77,370	144	truck	98,320	9	<1	Ca-986	
			6	40	surface	auger	20,950							
						Total	98,320							
Commercial Minerals, Inc.	Buckeye Rd.	Center	6	29	surface	strip	4,494	19	truck	4,494	1		Ca-997	
	Ketchum North	Center	7	29	surface	strip	21,870	67	truck	21,870	4	<1	Ca-998	
	Ketchum East	Center, Wayne	7	29	surface	strip	55,832	95	truck	64,950	7	1	Ca-CM	
						auger	9,118							
						Total	64,950							
D. & D. Mining Co.	Saviors Mine	Unity	4	30	surface	strip	39,678	229	truck	39,678	7	8	Ca-348	
	Burt Strip	Fairfield	5	10	surface	strip	1,682	41	truck	2,203	1	2	Ca-985	
			6	20	surface	auger	521							
John Glenn Mining Co. Mardis Coal Co. Oldtown Coal Co.						Total	2,203							
	Bailey Mine	Hanover	7A,W	36	surface	strip	903	40	truck	903	1		Ca-JG	
	Jarvis	Hanover	7		surface	strip	2,486	46	truck	2,486	1		Ca-MC	
	Ferris #1	Center, Wayne	6		surface	auger	720	5	truck	720	<1		Ca-350	
COSHOCTON COUNTY – Total production = 1,149,558 tons														
Holmes Limestone Co. Oxford Mining Co., Inc.	Miley Shurtz	Mill Creek Lafayette	6		surface	strip	682	76	truck	682	1		Cn-HI	
			6		surface	strip	148,655	230	truck	150,856	11	3	Cn-OX	
						auger	2,201							
R & F Coal Co.						Total	150,856							
	Hinds Broken Aro	Lafayette Bedford, Jackson	6		surface	strip	31,963	60	truck	31,963	3		Cn-OX1	
			6		surface	strip	205,755	185	water truck	21,931	21	3	Cn-RF3	
						Total	211,352		Total	189,421				
Noble Bartolec II						strip	39,545	79	truck	42,035	4	1	Cn-WL	
		Lafayette Oxford	6	30	surface	strip	175,177	262	water truck	33,903	17	2	Cn-P	
			5	30	surface	strip	33,903		truck	149,459				
			6			auger	6,432		truck	149,459				
						Total	181,609		Total	183,362				
Porcher Area		Oxford	5	22	surface	strip	31,856	80	water truck	7,845	3	<1	Cn-PA	
			6	22	surface	strip	21,970		truck	21,970				
						Total	29,815		Total	29,815				
Wolf-Isleta		Oxford	5	30	surface	strip	122,811	239	water truck	31,203	11	1	Cn-RF	
			6	30	surface	auger	6,356		truck	90,814				
						Total	129,167		Total	122,017				

R & R Minerals, Inc.	Isleta Central	Oxford	5,6		surface	strip auger	295,495 11,568	264	water truck	68,568 238,149	28	3	Cn-RF1
	Pollock	Oxford	5,6		surface	strip auger	307,063 46,174 6,723	182	water truck	306,717 12,522 38,858	4	1	Cn-RF2
	Fresno-McCleary	White Eyes	5 6	27 28	surface	strip	52,897 18,165	155	truck	51,380 18,165	3		Cn-841
	GUERNSEY COUNTY — Total production = 303,132 tons												
C L A Coal, Inc.	Berresford	Londonderry	8	60	surface	strip auger	7,568 747	88	truck	8,315	2	2	Gy-C
	Anco	Monroe	7	28	surface	strip auger	8,315 41,685 1,742	237	truck	43,427	9	3	Gy-310
Holmes Limestone Co. Northshore Coal, Inc. R & F Coal Co.	Byesville	Jackson	7		surface	strip	43,427		truck		1		Gy-327
	Buckeyeville #7	Jackson	7	66	surface	strip	10,650 54,910	76	truck	10,650 54,910	8	<1	Gy-315
	Whitaker	Jackson	7	72	surface	strip	11,367	278	truck	11,367	3	1	Gy-324
	Watson-Huhn	Millwood	8		surface	strip auger	28,772 7,403	183	water truck	8,630 27,632	3	<1	Gy-304 ⁵
R. T. G., Inc.	R. T. G. #7	Center	7	66	surface	strip auger	36,175 6,430 46,724	100	truck	36,262 53,154	6	2	Gy-313
	R. T. G. #8 Snyder-Bush	Center Wheeling	7 6	54 27	surface surface	strip strip auger	8,554 44,934 31,646	30 227	truck truck	8,554 76,580	2 8	2	Gy-319 Gy-318
HARRISON COUNTY — Total production = 2,521,449 tons													
Consolidation Coal Co.	Mahoning Valley #36	Athens	8 8A	48 36	surface	strip auger	589,675 208,610	249	truck	798,285	45	15	Hn-700
Harrison Mining Corp.	Nelms Mine — Cadiz Portal	Green	6A	60	slope	cont. miner	798,285 965,232	356	rail water truck	65,214 378,964 522,170		16	Hn-710
									Total	966,348			
Myers Mining R & F Coal Co.	Germano Mine-East	German	8		surface	strip	22,105	234	truck	22,105	3		Hn-757
	Hartley 519	Athens	8A 8 9	50 15 60 40	surface	strip auger	63,970 50,243	170	water truck	14,841 101,524	7	1	Hn-RF1
	Harrah West	Green	8	56	surface	strip	114,213 19,241	64	water truck	116,365 5,053 14,151	2	<1	Hn-748
									Total	19,204			
Melvin Schaney Schiappa Coal Co., Inc. Sunnydale Mining	Branson Ridge	Short Creek	8		surface	strip auger	288,437 35,753	318	water truck	91,408 213,469	25	3	Hn-754
									Total	304,877			
	Melvin Schaney Rose Valley	Green	8	48	surface	strip	17,466	139	truck	16,926	1		Hn-759
	Dodds Tipton	Archer Green	8A 8 8	56 20 48 48	surface surface	strip strip	35,867 1,956 12,068	140	truck	35,867	5	1	Hn-222
					surface	strip		18	truck	1,956	1	<1	Hn-761
					surface	strip		39	truck	12,068	1		Hn-758

⁴See also Carroll County.⁵See also Belmont County.

1994 OHIO DIRECTORY OF PRODUCING COAL-MINE OPERATORS, BY COUNTY - Continued

Name of company	Name of mine	Township	Seam		Type of mine	Production		Days in production in 1994	Disposition		Employment			State mine number
			Number	Thick-ness (inches)		Method	Tonnage		Method	Tonnage	Under-ground	Sur-face	Non-produc-tion	
HARRISON COUNTY (continued)	Smith	Cadiz	8	55	surface	strip	31,391	107	truck	44,793	4	3	Hn-750	
			8A	20		auger	13,402							
	Varkony Mining Co. W.B. Coal Co., Inc.	Green	8	18	surface	strip	44,037	226	truck	44,037	9	1	Hn-217	
		German	H	18	surface	strip	44,779	37	truck	44,779	6	1	Hn-738	
		German	H	18	surface	strip	56,906	35	truck	56,906	8	1	Hn-WB	
McGinness Bros. #3	Green	8,8A		surface	strip	24,679	22	water	36,464	4	1	Hn-756		
						auger	15,632		truck	1,907				
						Total	40,311		Total	38,371				
HOLMES COUNTY – Total production = 313,057 tons	Berlin	Berlin, Walnut Creek	5,6	30	surface	strip	9,358	76	truck	9,358	1		Hs-HLC1	
			5,6	30	surface	strip	123,289	292	truck	123,289	7	1	Hs-97	
	557-Roman School	Clark	4	24	surface	strip	15,320	292	truck	15,320	5	1	Hs-67	
		Beachy	Clark	3A, 4		surface	strip	47,642	170	truck	47,642	2		Hs-524
	Miller Mining, Inc.	Beachy-Gerber	Walnut Creek	5,6		surface	strip	48,374	147	truck	48,374	2	1	Hs-M
	Wasteland Management	Walnut Creek	5,6		surface	strip	69,074	254	truck	69,074	13	1	Hs-525	
JACKSON COUNTY – Total production = 1,475,426 tons	Katie Walke	Jefferson	5		surface	strip	4,100	20	truck	4,100	1	1	Jkn-CH	
			5		surface	strip	513	10	truck	513	1	1	Jkn-CH1	
	Sadler	Jefferson	5		surface	strip	1,454	10	truck	1,454	1	1	Jkn-1007	
	Cedarloo/Jenkins/Greer	Madison	5		surface	strip	107,986	112	truck	107,986	6	<1	Vn-192 ⁶	
	Carr Ridge Pit	Milton	3	24	surface	strip								
R. A. Eberts Co.			4A	24										
			5	12										
			2	30										
Sands Hill Coal Co., Inc.	Walton	Coal			surface	strip	7,911	10	water	5,685	22	1	Jkn-1066 ⁷	
									truck	2,226				
									Total	7,911				
	Bethel Ridge	Liberty	1	22	surface	strip	72,070	180	water	56,833			Jkn-S1	
									truck	15,237				
									Total	72,070				
	Sands Hill Strip #5	Milton	4A	34	surface	strip	383,146	250	water	296,291			Jkn-1069	
			5	23					truck	86,855				
			6	16					Total	383,146				
			6A	16										
	Sands Hill Strip #4	Milton	W	24	surface	strip	62,030	151	water	48,110			Jkn-SH ⁶	
			4A	30					truck	13,920				
			5	36					Total	62,030				
			6	16										
Stewart Coal Co.	Dark Hollow	Jackson	4A	48	surface	strip	160,081	261	truck	160,081	19	1	Jkn-1070	
Waterloo Coal Co., Inc.	Bowman Strip	Bloomfield, Madison	4A	34	surface	strip	676,135	281	truck	676,135	35	35	Jkn-367	
			5											
JEFFERSON COUNTY – Total production = 1,325,113 tons														
	Omatis	Smithfield, Wayne	8	56	surface	strip	33,132	100	truck	33,132	3		Jfn-A	
	8A		20											
Anthony Mining Co., Inc.	Maine 307	Wayne	8	54	surface	strip	8,772	30	truck	8,772	2		Jfn-789	
			8A	12										
Black Stone Mining Co.	Sapp	Knox, Saline	8	40	surface	strip	130,058	334	truck	130,058	15	1	Jfn-830	

Boich Mining Co. D & L Contractors, Inc.	Betsy Mine	Cross Creek	8	54	surface	strip	213,956	127	truck	214,956	23	15	Jfn-528
	D & L Strip	Smithfield	8A	12	surface	strip	7,732	81	truck	7,732	2	2	Jfn-780
	NW Piney Fork	Smithfield	8A	18	surface	strip	36,351	140	truck	36,351	9	1	Jfn-829
	F & M. Strip	Wayne	8A	20	surface	strip	23,633	50	truck	23,633	3	3	Jfn-784
F & M. Coal Co. Joyce Coal Co., Inc.	Nemo	Warren	8	54	surface	strip	14,753	51	truck	14,753	1	1	Jfn-821
	Salt Run	Wells	8	54	surface	strip	63,940	143	truck	68,562	7	1	Jfn-JC
Penn Eagle Coal Corp.	B & S Mine	Saline	6	25	surface	strip	68,562	6	truck	2,018	1	<1	Jfn-PE
	Salt Run Mine	Wells	8	50	surface	strip	7,916	46	truck	7,916	2	2	Jfn-831
R & F Coal Co.	Friendship Park	Smithfield, Wayne	8A	6	surface	strip	3,850	53	water	2,118	1		Jfn-824
	Friendship II/Jeffco	Wayne	8		surface	auger	4,215		truck	5,932			
S. & D. Construction Corp.	Pipo #51	Knox, Saline	8	40	surface	strip	8,065		Total	8,050			
	Sterling North	Brush Creek	8A	36	drift	cont. miner	221,727	316	water	50,418			
Sterling Mining Co. Valley Mining, Inc.	Sterling South	Brush Creek	7	36	surface	strip	17,260		truck	190,389			
	York	Green, Smithfield	8	60	surface	strip	238,987		Total	240,807		3	Jfn-J
Weirton Construction Co.	Kurtz	Smithfield	8A	22	surface	strip	64,575	241	truck	64,575	16	2	Jfn-SD
	Greentown	Smithfield	8	60	surface	strip	359,993	280	truck	359,993		1	Jfn-823
	#19	Wells	8A	18	surface	strip	412	3	truck	412	1	1	Jfn-ST
			8	54	surface	auger	10,034	71	truck	10,034	2	2	Jfn-813
LAWRENCE COUNTY — Total production = 18,795 tons				55	surface	strip	44,484	198	truck	63,891	8	1	Jfn-833
					surface	auger	19,407						
Belville Mining Co., Inc.	Brady Creek	Smithfield	8	60	surface	strip	63,891	87	truck	13,101	3	2	Jfn-807
	Davis Strip	Wells	8A	18	surface	strip	13,101	250	truck	21,901	10	1	Jfn-687
MAHONING COUNTY — Total production = 18,441 tons					surface	auger	6,024						
					surface	Total	14,507						
Solomon's Mines, Inc. Thompson Bros. Mining Co.	Solomon's Mines, Inc.	Washington	4A	15	surface	strip	2,215	106	truck	2,215	4	1	Le-B
	Peres Mine	Washington	4A	18	surface	strip	16,580	88	truck	16,580	5	3	Le-BM
MEIGS COUNTY — Total production = 3,298,895 tons					surface	strip	1,194	10	truck	1,194	1	1	Mg-632
					surface	strip	17,247	136	truck	17,247	1	2	Mg-65
Southern Ohio Coal Co.	Meigs Mine #2	Columbia	4A	57	shaft	longwall	1,896,954	254	conveyor	2,304,330		97	Ms-294
					shaft	cont. miner	391,087						
	Meigs Mine #31	Salem	4A	57	shaft	longwall	2,288,041	102	conveyor	1,009,991		134	Ms-293 ⁶
					shaft	cont. miner	838,046						
MONROE COUNTY — Total production = 3,142,743 tons					shaft	Total	172,808						
					shaft	Total	1,010,854						
Quarto Mining Co. (subsidiary of Consolidation Coal Co.)	Powhatan #4	Salem	8	60	shaft	longwall	2,712,079	249	water	2,940,792		121	Me-4
					shaft	cont. miner	430,664		truck	2,249			
					shaft	Total	3,142,743		Total	2,943,041			

⁶See also Vinton County.⁷Employment reported for Jfn-1066 is a summary for all Sands Hill Coal Co., Inc. operations in Jackson County.

1994 OHIO DIRECTORY OF PRODUCING COAL-MINE OPERATORS, BY COUNTY — Continued

Name of company	Name of mine	Township	Seam		Type of mine	Production		Days in production in 1994	Disposition		Employment		State mine number					
			Number	Thick-ness (inches)		Method	Tonnage		Method	Tonnage	Under-ground	Sur-face						
MORGAN COUNTY — Total production = 856,734 tons	Muskingum Mine	Meigsville, Bristol, Manchester	9	48	surface	strip	827,723	138	conveyor	847,735	40	184	Ne-41 ^s					
						auger	29,011											
						Total	856,734											
MUSKINGUM COUNTY — Total production = 476,391 tons	Muskingum Mine	Meigs	9	48	surface	strip	161,916	36	conveyor	240,539	12	45	Ne-41 ⁹					
						auger	78,178											
						Total	240,094											
Oxford Mining Co.	Adamsville	Madison	6 6A		surface	strip	218,166	250	truck	236,297	19	3	Mum-O					
						auger	18,131											
						Total	236,297											
NOBLE COUNTY — Total production = 979,561 tons	B & N Coal, Inc.	Elk Elk Elk Enoch, Jefferson Jefferson Jefferson Marion, Stock Brookfield, Noble, Sharon	9 9 9 9 9 9 9 9	30 30 30 30 30 36 36 47	surface surface surface surface surface surface surface surface	strip	4,563	21 256 198 256 216 216 256 31	truck truck truck truck truck truck truck conveyor	4,563 78,510 24,920 71,940 109,557 72,019 396,177 221,069	1 8 3 8 10 7 19 16	<1 1 1 1 1 1 2 40	Ne-150 Ne-155 Ne-BN1 Ne-BN Ne-151 Ne-1008 ¹⁰ Ne-154 Ne-41 ¹¹					
						surface	78,510											
						strip	24,920											
						surface	71,940											
						strip	109,557											
						strip	256											
						strip	72,019											
						strip	396,177											
						strip	219,035											
						strip	2,840											
						Total	221,875											
						PERRY COUNTY — Total production = 427,823 tons	Avis Coal Co.							Monroe, Pleasant, Salt Lick	6	120	surface	strip
auger	64,901																	
Total	216,955																	
strip	26,796	97 15 6 66 50 258 200	truck truck truck truck truck truck truck	26,796 6,321 2,640 8,357 43,141 27,861	3 1 1 1 4 1 3			Py-BMR Py-BM1 Py-BM2 Py-B Py-317 Py-JC										
surface	9,760																	
strip	3,310																	
strip	4,615																	
strip	43,141																	
strip	24,671																	
strip	3,190																	
Total	27,861																	
strip	95,385																	
STARK COUNTY — Total production = 392,049 tons	American Landfill, Inc.					Sandy	5 6A 5,6		24 24 30	surface surface surface	strip	19,364	70 252 306 231 292 169	truck truck truck truck truck truck	19,364 91,361 132,569 11,676 84,187 52,892	15 9 16 3 7 14	1 1 2 3 3	Sk-246 Sk-249 Sk-208 Sk-235 Sk-HLC Sk-217
											strip	91,361						
											strip	132,569						
		strip	11,676															
		strip	84,187															
		strip	52,892															

TUSCARAWAS COUNTY — Total production = 2,053,962 tons									
Belden Brick Co.	Shanesville Pit Wallick Pit Moomaw Pit Belden Pit Costain Coal, Inc.	Auburn Franklin, Wayne Sugar Creek Sugar Creek Clay, Salem	4 4 3A,4 4 5 6 7	surface surface surface surface surface	strip strip strip strip strip Total	1,722 6,771 11,277 1,289 219,872 37,164 257,036	15 20 35 15 221	truck truck truck truck truck	1 1 1 1 20 Ts-1939 Ts-1841 Ts-1517 Ts-1646 Ts-115
Daron Coal Co., Inc.	Pleasant Valley Mine	Union	6A 7	surface surface	strip auger Total	64,605 19,184 83,789	253	truck	1 Ts-1991
	Reed Mine	Union	6 7	surface surface	strip auger Total	64,331 19,922 84,253	253	truck	3 Ts-DC
	Peach Pit	Union	7	surface	strip auger Total	11,910 1,082 12,992	85	truck	1 TS-DCC
Green Basin Coal, Inc. Holmes Limestone Co.	Blackhawk James Slurry Pit	Lawrence Dover Franklin, Lawrence	5 7 7	surface surface surface	strip strip strip Total	16,383 181,691 995 12,992	214 292 15	truck truck truck	1 Ts-2024 Ts-2038 Ts-HC
Kimble Clay & Limestone Co.	Stone Creek Dennison Clark-Reynolds Kimble Clay & Limestone Co.	Jefferson, York Rush Salem Dover	7 7 7 6 7	surface surface surface surface surface	strip strip strip strip auger Total	164,465 117,732 19,737 63,870 30,836 94,706	292 292 241 269	truck truck truck truck	1 Ts-2023 Ts-HLC Ts-2045 Ts-2037
	Kimble Clay & Limestone Co.	Dover	3A 4	surface	strip Total	14,940	80	truck	2 Ts-1727
	Kimble Clay & Limestone Co.	Auburn, York	5 5 6	surface	strip auger Total	186,233 20,107 206,340	296	truck	3 Ts-2019
	Kimble Clay & Limestone Co.	Sugar Creek, Wayne	3A 4 5	surface	strip auger Total	69,478 14,053 83,531	292	truck	2 Ts-2022
L & M Mineral Co.	Luikert	Mill, Warwick	5,6	surface	strip auger Total	27,294 20,708 48,002	100	truck	3 Ts-1914
Red Malcuit, Inc.	Spring RMI #2	Mill, Warwick Franklin, Wayne	5,6 3A 5	surface surface	strip strip Total	9,389 57,654 67,043	1 269	truck truck	2 Ts-1982 Ts-2007
	RMI #3	Sandy	5A 5A 6 7	surface	strip auger Total	35,623 1,200 36,823	203	truck	1 Ts-2006

*See also Muskingum and Noble Counties.

**See also Morgan and Noble Counties.

**See also Washington County.

**See also Morgan and Muskingum Counties.

1994 OHIO DIRECTORY OF PRODUCING COAL-MINE OPERATORS, BY COUNTY — Continued

Name of company	Name of mine	Township	Seam		Type of mine	Production		Days in production in 1994	Disposition		Employment			State mine number	
			Number	Thick-ness (inches)		Method	Tonnage		Method	Tonnage	Under-ground	Production	Non-produc-tion		
TUSCARAWAS COUNTY (continued)	Miller Mining, Inc.	Auburn, Bucks	5,6		surface	strip	197,992	254	rail truck	43,870	23	1	Ts-GC		
						Total	115,798		truck	159,668					
		Auburn, Bucks Auburn, Jefferson, York	5,6 6	surface surface	strip	33,427	104	truck	33,427	2	2	Ts-MM3 Ts-2027			
					strip auger	8,733 590		truck	9,323						
	R & F Coal Co.	Dover Sugar Creek Sugar Creek Sugar Creek Rush	3A,4 5,6 3A,4,6 3A,4 7	surface surface surface surface surface	Total	9,323	254	truck	100,239	6	1	Ts-2039			
					strip	100,239		truck	35,297				5	1	Ts-2010
					strip	35,297		truck	3,034				32	1	Ts-2035
					strip	3,034		truck	23,911				141	3	Ts-MM2
					strip	23,911		water	8,993				131	1	Ts-2043
					strip auger	31,401 4,461		truck	26,719				Total	35,712	3
Toronto A & L Coal, Inc.	James Tunnel Hill	Sandy	6	42	surface	strip	46,430	133	truck	55,978	3	2	Ts-2005		
Valley Mining, Inc.	Crim	Mill	7	30	surface	strip	16,881	149	truck	23,188	3	3	Ts-2034		
	Taylor	Salem	6	24	surface	strip auger	23,188 262	116	truck	23,507	1	16	Ts-2047		
Winfield Clay	Winfield Clay	Dover	5		surface	strip	687	10	truck	687	67	3	Vn-191		
Addington, Inc.	Dundas Job	Clinton	4 5 6 7	24 24 24	surface	strip	523,516	137	truck	801,117	8	3	Vn-183		
						Total	23,507	truck	167,815	15	5	Vn-184			
Benedict, Inc.	Waldron Pit Allied West	Clinton, Elk Elk	3A 3 3A 4A 5 4 5 6	36 36 30 36 24 24 15 30	surface surface	strip	90,834	61	truck	90,834	4	1	Vn-187		
						strip	167,815	112	truck	167,815	12	4	Vn-172		
R. A. Eberts Co., Inc.	Austin Pit	Elk	4 5 6	36 15 30	surface	strip	42,511	28	truck	42,511	6	1	Vn-192 ¹²		
	Mitchell Hollow	Swan	4 5 6	30 15 30	surface	strip	133,836	89	truck	133,836	11	5	Vn-182		
	Carr Ridge Pit	Clinton	3 4 4A 5	24 24 24 12	surface	strip	107,986	110	truck	107,986	72				
	Green Pit	Madison	3 4 4A 5	18 12 12 12	surface	strip	54,897	72	truck	54,897					

Elk Coal, Inc. Sands Hill Coal Co., Inc.	Elk Strip Sands Hill Strip #3	Elk Clinton	4 W 4A 5 6	14 33 24 20	surface surface	strip strip	630 353,520	5 303	truck water truck Total	630 272,725 80,795 353,520	2 23	2 60	Vn-194 Vn-S
	Sands Hill Strip #4	Clinton	W 4A 5 6	24 30 36 16	surface	strip	62,030	153	water truck Total	48,110 13,920 62,030	22		Jkn-SH ¹²
Southern Ohio Coal Co.	Meigs Mine #31	Wilkesville	4A	57	drift	longwall cont. miner Total	838,046 172,808 1,010,854	106	conveyor	1,009,992	121	135	Ms-293 ¹³
WASHINGTON COUNTY – Total production = 19,547 tons													
B & N Coal, Inc.	Shilling	Aurelius	9	36	surface	strip	19,547	40	truck	19,547	1	<1	Ne-1008 ¹⁴
Rash Energy, Inc.	Rash Energy, Inc.	Paint	6		surface	strip	3,543	10	truck	3,543	1	1	We-26
WAYNE COUNTY – Total production = 3,543 tons													

¹²See also Jackson County.¹³See also Meigs County.¹⁴See also Noble County.

1994 OHIO ALPHABETICAL DIRECTORY OF INDUSTRIAL-MINERAL MINE OPERATORS

*For those mines for which the Division of Mines has not assigned a state mine number, a letter designation is used (example: Ts-A).
If there are no sales or production figures given for an operation, that operation reported no sales or production in 1994.*

Name, address, telephone number, and president/owner/manager of company	Name of mine (and map location number)	County	Commodity	1994 sales (tons)	1994 production (tons)	State mine number	Division of Reclamation permit number
A-1 All Ohio Sand & Gravel Co. 2665 N. Turkeyfoot Rd. Akron, OH 44319 216-644-0700 Sam Serves, pres.	A-1 All Ohio Sand & Gravel Co. (583)	Summit	sand & gravel	38,461	38,461	St-50	IM-722
Acme Sand & Gravel 128 First St. W Strasburg, OH 44680 216-756-3177 Susan K. Malcuit, owner	Acme Sand & Gravel (612)	Tuscarawas	sand & gravel			Ts-A	IM-1218
Addy Sand & Gravel Co. Route 3, 21441 County Rd. 106 Newcomerstown, OH 43832 614-498-8811 Gerald L. Addy, owner	Addy Sand & Gravel Co. (540)	Coshocton	sand & gravel			Cn-A	IM-971
Agg Rok Materials Div. of Wapak Sand & Gravel Co. 711 Frank Rd. Columbus, OH 43223 614-444-4422 Ralph E. Heffner, pres.	Agg Rok Materials (94)	Franklin	sand & gravel	611,338	602,640	Fn-36	IM-302
Akzo Nobel Salt, Inc. P.O. Box 6920 Cleveland, OH 44101 216-651-7200 Harry Burns, pres.	Cleveland Mine (1)	Cuyahoga	salt	2,348,500	2,213,977	Cya-30	
Akzo Nobel Salt, Inc. 2065 Manchester Rd. Akron, OH 44309-0149 216-745-0031 Harry Burns, pres.	Akzo Nobel Salt, Inc. (4)	Summit	salt	224,323	220,953	St-9127	
Alan Stone Co., Inc. P.O. Box 127 Chesterhill, OH 43728 614-554-6191 Claudia Staley, pres.	Marietta Quarry (51) Alan Stone Co., Inc. (43)	Belmont Washington	sandstone sandstone			Bt-1193 Wn-45	IM-1117 IM-125
William Albert, Inc. 1300 Cassingham Hollow Rd. Coshocton, OH 43812 614-622-3045 William Albert, pres.	William Albert, Inc. (438) (88)	Coshocton	sand & gravel clay	23,239	24,940	Cn-828	IM-1026
Allgeier & Son, Inc. 6386 Bridgetown Rd. Cincinnati, OH 45248 513-574-3735 Earl W. Allgeier, pres.	State Route 128 (467) Miami River Rd. (521)	Hamilton Hamilton	sand & gravel sand & gravel	200 45,950	200 45,950	Hmn-AS Hmn-AS1	IM-1106 IM-797
Allied Corp., Inc. 1750 Highland Dr. Twinsburg, OH 44087 216-425-7861 Charles Rauh, pres.	Allied Corp., Inc. (435)	Stark	sand & gravel			Sk-173	IM-879
American Aggregates Corp. P.O. Box 147515 Dayton, OH 45413-7515 513-454-1128 Geoff C. Harris, pres.	Hamilton #710 (29) Fairfield #711 (30) Urbana #215 (48) Springfield #423 (16) Fairborn #413 (52) Fort Jefferson #424 (19) Delaware Stone #227 (22) Shawnee #225 (20) Blue Rock Limestone #427 (27) Sugar Creek Plant #223 (29) Marble Cliff #224 (30) Columbus #210 (95) Lockbourne #213 (96) Columbus Limestone #221 (31) Cedarville Limestone #425 (32) Fairborn Limestone #431 (142) Haines Rd. #419 (405) Xenia #414 (110)	Butler Butler Champaign Clark Clark Darke Delaware Delaware Fayette Fayette Franklin Franklin Franklin Franklin Greene Greene Greene Greene	sand & gravel sand & gravel sand & gravel limestone sand & gravel limestone limestone limestone limestone limestone sand & gravel sand & gravel limestone limestone sand & gravel sand & gravel limestone limestone sand & gravel sand & gravel	844,858 1,813,857 177,913 53,797 529,228 315,506 473,705 905,370 288,772 241,690 1,438,786 863,512 241,690 3,423,887 284,491 323,008 178,541 522,083	794,888 1,616,343 87,734 120 502,877 329,616 334,374 827,643 124,135 163,197 1,256,870 947,716 163,197 3,490,572 281,413 248,211 184,886 448,119	Br-5 Br-35 Cpn-1 Ck-1 Ck-13 Dke-1 Del-3 Del-4 Fe-2 Fe-3 Fn-2 Fn-6 Fn-23 Fn-53 Ge-17 Ge-25 Ge-32 Ge-33	IM-153 IM-200 IM-371 IM-373 IM-366 IM-362 IM-327 IM-262 IM-169 IM-329 IM-261 IM-185 IM-183 IM-185 IM-435 IM-437 IM-400 IM-379

1994 OHIO ALPHABETICAL DIRECTORY OF INDUSTRIAL-MINERAL MINE OPERATORS – Continued

Name, address, telephone number, and president/owner/manager of company	Name of mine (and map location number)	County	Commodity	1994 sales (tons)	1994 production (tons)	State mine number	Division of Reclamation permit number
American Aggregates Corp. (con't)	Spring Valley Gravel #434 (404) Beavercreek Limestone #426 (155) Harrison #712 (118) Campbell Rd. #715 (407) Kilby Rd. #713 (119) Newark #214 (174) East Liberty #226 (49) Troy Gravel #435 (219) Piqua Gravel #430 (216) Tipp City Gravel #435 (220) Phillipsburg Limestone #421 (70) Dayton Limestone #420 (71) Huber Heights Limestone #432 (143) Rip Rap Road #416 (224) Circleville #216 (251) American Aggregates Corp. (571) Franklin #714 (349)	Greene Greene Hamilton Hamilton Hamilton Licking Logan Miami Miami Miami Montgomery Montgomery Montgomery Montgomery Pickaway Preble Warren	sand & gravel limestone sand & gravel sand & gravel sand & gravel sand & gravel limestone sand & gravel sand & gravel sand & gravel limestone limestone limestone sand & gravel sand & gravel sand & gravel sand & gravel	508,634 1,065,062 16,000 64,000 175,643 394,806 730,955 220,902 93,106 482,819 6,075 605,940	479,313 1,037,148 0 0 134,381 432,002 578,363 189,112 1,669 478,474 0 594,631	Ge-42 Ge-45 Hmn-37 Hmn-69 Hmn-AAC Lg-2 Lgn-1 Mi-3 Mi-6 Mi-8 My-1 My-23 My-32 My-66 Pky-1 Pre-AAC Wan-38	IM-954 IM-364 IM-170 IM-969 IM-716 IM-184 IM-574 IM-462, IM-658 IM-356 IM-355 IM-374 IM-368 IM-1012 IM-677 IM-409, IM-428 IM-779 IM-615
American Landfill, Inc. 1 American Way Warren, OH 44484 216-856-8800 Scott Porter, pres.	American Landfill, Inc. (123) (123)	Stark	clay shale	52,823 316,967	52,823 316,967	Sk-246	IM-1114
American Olean Tile Co., Inc. Lewisport, KY 42351 502-295-3411 Hervey Howell, mgr.	Jefferys (24)	Lawrence	clay			Le-440	IM-828
American Sand & Gravel 8188 Wales Rd. NW North Canton, OH 44720 216-494-6455 Christopher Scala, pres.	American Sand & Gravel (387) American Sand & Gravel (386) Crystal Springs (455)	Portage Stark Stark	sand & gravel sand & gravel sand & gravel	1,200 27,500 888,000	1,200 27,500 888,000	Pe-ASG Sk-203 Sk-243	IM-212 IM-654 IM-908
Andre Land Forming 14687 Road M Wauseon, OH 43567 419-337-8908 Paul & Nathan Andre, partners	Andre Land Forming (170)	Fulton	clay			Ftn-A	IM-1249
Apache Aggregate & Paving Co. 46626 County Rte. 495 Coshocton, OH 43812 614-622-5904 Charlene Ross, pres.	Apache Aggregate & Paving Co. (69) Apache Aggregate & Paving Co. (70)	Coshocton Coshocton	sand & gravel sand & gravel	110,386	101,547	Cn-718 Cn-783	IM-227 IM-717
Ashcraft Sand & Gravel, Inc. 5850 Dry Fork Rd. Cleves, OH 45002 513-367-2177 Rick Ashcraft, v. pres.	Ashcraft Sand & Gravel, Inc. (120)	Hamilton	sand & gravel	82,351	82,351	Hmn-54	IM-710
Athens Hocking Reclamation Center 35380 Hocking Dr. P.O. Box 946 Logan, OH 43138 614-385-6019 Edward F. Kilbarger, pres.	Athens Hocking Reclamation Center (81)	Athens	clay	2,324	2,324	As-594	
Atlas Towing Co. P.O. Box 1632 Parkersburg, WV 26101 304-428-0341 Christopher V. Criss, pres.	Belpre Bank Run (432)	Washington	sand & gravel	19,052	10,909	Wn-54	IM-383
ATS Enterprises P.O. Box 128 Haverhill, OH 45636 614-532-4058 Lowell Gullett, plant mgr.	Haverhill (306)	Scioto	sand & gravel	446,821	442,471	So-79	IM-221
Aurora Sand & Gravel, Inc. 60 Treat Rd. Aurora, OH 44202 216-641-0300 Gary Helf, pres.	Aurora Sand & Gravel, Inc. (260)	Portage	sand & gravel	229,716	223,495	Pe-84	IM-868

1994 OHIO ALPHABETICAL DIRECTORY OF INDUSTRIAL-MINERAL MINE OPERATORS — Continued

Name, address, telephone number, and president/owner/manager of company	Name of mine (and map location number)	County	Commodity	1994 sales (tons)	1994 production (tons)	State mine number	Division of Reclamation permit number
Ayers Limestone Quarry, Inc. 2000 Colerain Pike P.O. Box 67 Martins Ferry, OH 43935 614-633-2958 Thomas E. Ayers, pres.	Ayers Limestone Quarry, Inc. (12)	Belmont	limestone	73,747	73,747	Bt-716	IM-1
B & D Paving Co. P.O. Box 463 Powhatan Point, OH 43942 304-233-6505 Suzanne Hendershot, pres.	B & D Paving Co. (424)	Monroe	sand & gravel	7,080	7,080	Me-508	IM-1000
B-M Machine Co. 12264 Princeton Rd. Huntsburg, OH 44046 216-635-9151 Robert Zalar, owner	B-M Machine Co. (442)	Geauga	sand & gravel			Gea-39	IM-974
B & N Coal, Inc. P.O. Box 100 Dexter City, OH 45727 614-783-3575 Gilbert Baker, pres.	B & N Coal, Inc. (179)	Noble	limestone			Ne-B	IM-897
Baker Sand, Inc. 7800 White Rd. Burbank, OH 44214 216-948-1448 John E. Baker, pres.	Baker Sand, Inc. (203)	Medina	sand & gravel	871,528	871,528	Ma-20	IM-448
Barrett Paving Materials, Inc. Midwest Division — South 7374 Main St. Cincinnati, OH 45244 513-271-6200 Xavier Lepercq, pres.	Perintown (59)	Clermont	sand & gravel			Ct-9	IM-526
Barrett Paving Materials, Inc. Midwest Division — North 727 E. Ash St. P.O. Box 1458 Piqua, OH 45356 513-279-3200 Jim Weeks, dist. mgr.	Fairborn #141 Gregory Quarry (66) Barrett Paving Materials, Inc. (177)	Clark Miami Miami	sand & gravel limestone limestone	267,000 27,620 423,000	320,000 27,620 423,000	Ck-28 Mi-502 Mi-BPM	IM-1100 IM-414 IM-1169
Barrett Paving Materials, Inc. 3835 Centennial Rd. Sylvania, OH 45860 419-841-2816 Michael E. Smith, plant mgr.	Sylvania Quarry (160)	Lucas	limestone	139,472	161,297	Ls-12	IM-953
Beaver Excavating, Inc. P.O. Box 6059 Canton, OH 44706 216-478-2151 Mark Sterling, pres.	Stone Products (607) (162)	Stark	sand & gravel clay	4,000 80,000	4,000 80,000	Sk-BE	IM-1202
Beck Sand & Gravel, Inc. 2820 Webb Rd. Ravenna, OH 44266 216-626-3863 Robert E. Wenrich, pres.	Beck Sand & Gravel, Inc. (256)	Portage	sand & gravel	276,895	276,895	Pe-50	IM-96
Becky Lane Trucking, Inc. 441 Iowa St. Ashland, KY 41101 606-325-8301 Janet Griffiths, pres.	B & L Sand (167)	Lawrence	sand & gravel	64,056	64,056	Le-430	IM-844
Paul D. Beery Trucking Co. 4770 Cincinnati-Zanesville Rd. NE Lancaster, OH 43130 614-653-5061 Paul D. Beery, pres.	Paul D. Beery Trucking Co. (401)	Fairfield	sand & gravel	11,322	180	Fd-14	IM-933
Belden Brick Co. P.O. Box 20910 Canton, OH 44701 216-852-2424 William H. Belden, Jr., pres.	Moomaw Pit (187) (62) (56) (56)	Tuscarawas	limestone sandstone clay shale	3,320 50,316 55,705	3,320 50,316 55,705	Ts-1517	IM-46

1994 OHIO ALPHABETICAL DIRECTORY OF INDUSTRIAL-MINERAL MINE OPERATORS – Continued

Name, address, telephone number, and president/owner/manager of company	Name of mine (and map location number)	County	Commodity	1994 sales (tons)	1994 production (tons)	State mine number	Division of Reclamation permit number
Belden Brick Co. (cont.)	Belden Pit (57) (57)	Tuscarawas	clay shale	34,425 49,567	34,425 49,567	Ts-1646	IM-44
	Wallick Pit (71) (58) (58)	Tuscarawas	sandstone clay shale	4,000 136,963 23,579	4,000 136,963 23,579	Ts-1841	IM-45
	Shanesville Pit (59) (59)	Tuscarawas	clay shale	35,591 143,491	35,591 143,491	Ts-1939	IM-47
	Beagle Pit (60) Plotner Pit (181) (147) (147)	Tuscarawas Tuscarawas	clay limestone clay shale	4,066	4,066	Ts-1960 Ts-B	IM-48 IM-49
	Belden Brick Co. (191) (177) (177)	Tuscarawas	limestone clay shale			Ts-BB	IM-1221
Belville Mining Co., Inc. P.O. Box 834 Ironton, OH 45638 614-643-2331 Robert E. Belville, pres.	Belville Mining Co. #1 (159) (93)	Lawrence	limestone clay	87,625 5,658	28,607 5,658	Le-B	IM-1188, D-0746
Benco Leasing, Inc. dba Goshen Sand & Gravel 1012 Commercial Ave. SE New Philadelphia, OH 44663 216-339-3339 Ben Cookson, pres.	Goshen Sand & Gravel (389)	Tuscarawas	sand & gravel	33,956	40,331	Ts-1976	IM-941, IM-942
Best Sand Corp. 11830 Ravenna Rd. Chardon, OH 44024 216-946-3441 Charles Fowler, pres.	Best Sand Corp. (17) Schrader Quarry (45)	Geauga Pike	sandstone sandstone	690,782 9,533	806,389 8,000	Gea-3 Pke-31 ¹	IM-89 IM-835
Beverly Slag Co. P.O. Box 599 McConnelsville, OH 43756 614-962-5621 Carl L. Price, v. pres.	Devola Pit (364)	Washington	sand & gravel			Wn-55	IM-669
Big Walnut Sand & Gravel, Inc. 2112 Eakin Rd. Columbus, OH 43223 614-224-2678 Steven D. Rowe, partner	Big Walnut Sand & Gravel, Inc. (97)	Franklin	sand & gravel	40,000	40,000	Fn-14	IM-832
Black Gold Recovery, Inc. 65105 Old Route 800 Barnesville, OH 43713 614-838-6555 Tim Hall, pres.	Black Gold Recovery Limestone (151)	Belmont	limestone	15,836	15,836	Bt-1192	IM-1093
Black Top Contracting, Inc. P.O. Box 98 Belpre, OH 45714 614-423-5455 Terry R. Wyatt, pres.	Black Top #1 (19)	Athens	sand & gravel	16,346	16,346	As-588	IM-630
E. E. Blair Construction Co. P.O. Box 39 Wheelersburg, OH 45694 614-574-6575 Edwin E. Blair, pres.	Blair Pit (303)	Scioto	sand & gravel	114,958	114,958	So-98	IM-474
Blue Jay Enterprises, Inc. P.O. Box 641 Zoar, OH 44697 216-874-2048 Leland D. Ervin, pres.	Swonger-Waltz Mine (85) (85)	Tuscarawas	clay shale	31,161 11,029	31,161 11,029	Ts-520	IM-214
Bluffton Stone Co. P.O. Box 26 Bluffton, OH 45817-0026 419-358-6941 Brent C. Gerkin, pres.	Bluffton Stone Co. (3)	Allen	limestone	356,275	356,275	An-1	IM-485
Blum Mining Co. P.O. Box 232 Carrollton, OH 44615 216-627-2670 Raymond Blum, pres.	Blum Mining Co. (476) (161)	Mahoning	sand & gravel limestone	64,013	64,013	Mg-629	IM-1008

¹This mine was operated January through October 1994 by Schrader Sand & Gravel, and November through December 1994 by Best Sand Corp.

1994 OHIO ALPHABETICAL DIRECTORY OF INDUSTRIAL-MINERAL MINE OPERATORS – Continued

Name, address, telephone number, and president/owner/manager of company	Name of mine (and map location number)	County	Commodity	1994 sales (tons)	1994 production (tons)	State mine number	Division of Reclamation permit number
Bolin & Bartley, Inc. 1217 County Rd. 1475 R.D. 1 Ashland, OH 44805 419-289-1507 Clarence W. Bolin, sec./treas.	Simington Rd. (509) Bolin & Bartley Sand & Gravel (409)	Ashland Richland	sand & gravel sand & gravel	41,000 88,596	41,000 77,898	Ald-16 Rd-20	IM-1120 IM-617
Bowerston Shale Co. 515 Main St. Bowerston, OH 44695 614-269-2921 William U. Milliken, pres.	Bowerston (11) Scott Farm (109)	Harrison Harrison	shale shale	26,222	26,222	Hn-152 Hn-B	IM-42 IM-1020
Bowerston Shale Co. 1329 Seven Hills Rd. NE Newark, OH 43055 614-763-3921 William U. Milliken, pres.	Hanover (31) Fazeysburg (38) (38)	Licking Muskingum	shale clay shale	13,884 5,985	13,884 5,985	Lg-501 Mum-776	IM-257 IM-256
D. H. Bowman & Sons, Inc. 1201 Mill St. Bellville, OH 44813-1227 419-886-2711 Richard D. Bowman, pres.	D. H. Bowman & Sons, Inc. (287)	Richland	sand & gravel	38,434	45,663	Rd-4	IM-279
Boyas Excavating, Inc. 4100 Brookpark Rd. Cleveland, OH 44134-1196 216-398-3900 Pete Boyas, pres.	Boyas' Valley View Quarry (595) (13)	Cuyahoga	sand & gravel sandstone			Cya-42	IM-686
Boyd Gravel Co. 24270 Twp. Rd. 1202 Coshocton, OH 43812 614-622-4406 Richard Mill, pres.	Boyd Gravel Co. (71)	Coshocton	sand & gravel	247,779	297,569	Cn-694	IM-293
Boyd Gravel Co. 1985 Gene Cox Memorial Dr. Dresden, OH 43821 614-754-3311 Donald Dowell, supt.	Jennings-Lacy (244) Prospect (243) Gilbert Cox (449)	Muskingum Muskingum Muskingum	sand & gravel sand & gravel sand & gravel	271,973	241,299	Mum-799 Mum-863 Mum-899	IM-317 IM-264
Briar Hill Stone Co. P.O. Box 457 Glenmont, OH 44628 216-377-5100 F. L. Waller, pres.	Quarry #26 (4) Quarry #3 (5) Quarry #32 (6) Quarry #24 (7) Quarry #18 (8) Quarry #54 (46) Quarry #55 (44) Quarry #31 (19) Quarry #6 (23)	Coshocton Coshocton Coshocton Coshocton Coshocton Coshocton Coshocton Holmes Knox	sandstone sandstone sandstone sandstone sandstone sandstone sandstone sandstone sandstone	1,999 5,238 5,848 2,670 21 6,166	1,999 5,238 5,848 2,670 21 6,166	Cn-13 Cn-659 Cn-686 Cn-692 Cn-695 Cn-809 Cn-815 Hs-49 Kx-12	IM-397 IM-232 IM-504 IM-294 IM-402 IM-909 IM-939 IM-418 IM-445
Briggs Sand & Gravel, Inc. Rte. 4 Box 303 County Rd. 10 Marietta, OH 45750 614-373-3363 James F. Briggs, pres.	Briggs Sand & Gravel, Inc. (365)	Washington	sand & gravel	10,400	10,400	Wn-508	IM-57
Brimfield Sand & Gravel 3613 Mogadore Rd. Kent, OH 44240-7431 216-673-7995 Beatrice Roth, pres.	Brimfield Sand & Gravel (605)	Portage	sand & gravel			Pe-102	IM-1184
Broadway Sand & Gravel, Inc. 2000 Sandridge Dr. Dayton, OH 45439 513-299-1166 George D. Jones, v. pres.	Broadway Sand & Gravel, Inc. (225)	Montgomery	sand & gravel	53,450	53,450	My-65	IM-594
Broshear Contractors, Inc. 2520 Millville-Ross Rd. Hamilton, OH 45013 513-863-3388 Gerald Broshear, pres.	Ross Township Gravel (31)	Butler	sand & gravel	14,026	14,026	Br-48	IM-562
Karl Bruggmann Sand & Gravel, Inc. 8420 Weaver Rd. Ravenna, OH 44266 216-626-3914 Donald H. Bruggmann, owner	Karl Bruggman Sand & Gravel, Inc. (257)	Portage	sand & gravel	66,812	66,812	Pe-15	IM-104

1994 OHIO ALPHABETICAL DIRECTORY OF INDUSTRIAL-MINERAL MINE OPERATORS — Continued

Name, address, telephone number, and president/owner/manager of company	Name of mine (and map location number)	County	Commodity	1994 sales (tons)	1994 production (tons)	State mine number	Division of Reclamation permit number
Oscar Brugmann Sand & Gravel, Inc. 3828 Dudley Rd. Mantua, OH 44255 216-274-8224 Roy Brugmann, pres.	Oscar Brugmann Sand & Gravel, Inc. (258) (70) Oscar Brugmann Sand & Gravel, Inc. (628)	Portage Portage	sand & gravel sandstone sand & gravel	579,129 53,006	674,000 78,000	Pe-9 Pe-OB	IM-119 IM-1241
BRYCO P.O. Box 870 Coshocton, OH 43812 614-623-0660 Paul Bryant, owner	Conesville (621) (168)	Coshocton	sand & gravel clay	56,425	56,425	Cn-B	IM-1238
Buckeye Excavating 13354 Arnold Rd. Dalton, OH 44618 216-857-7663 Steven R. Steiner, partner	Steiner Pit (535)	Wayne	sand & gravel	18,793	18,793	We-23	IM-1136
Buckeye-Industrial Mining Co. P.O. Box 389 Lisbon, OH 44460 216-337-9511 John C. Grisham, pres.	Myers (167) West Point (178) Cable Job (146) (146)	Carroll Columbiana Stark	clay shale clay shale	1,581 7,524	1,581 7,524	Cl-238 Ca-987 Sk-247	D-0703 D-0928 D-0929
James Bunnell, Inc. 5730 State Rte. 128 Cleves, OH 45002 513-353-1100 James Bunnell, pres.	James Bunnell, Inc. (123) James Bunnell, Inc. (124) James Bunnell, Inc. (195)	Hamilton Hamilton Hamilton	sand & gravel sand & gravel sand & gravel	573 604,422	573 604,422	Hmn-50 Hmn-59 Hmn-B	IM-205 IM-815 IM-1139
Burlington Sand & Gravel Co. P.O. Box 399 Chesapeake, OH 45619 614-894-5978 Vernon E. Collier, owner	Willow Creek (170)	Lawrence	sand & gravel	4,339	4,339	Le-426	IM-856
Burrgett Industries, Inc. P.O. Box 651 Newcomerstown, OH 43832 614-498-8754 Thomas J. Miller, pres.	Burrgett Industries, Inc. (532)	Tuscarawas	sand & gravel			Ts-2029	IM-1129
C.I.R., Inc. 2856 N. County Line Rd. Geneva, OH 44041-9604 216-352-2256 Louis W. Pirc, pres.	C.I.R., Inc. (625)	Lake	sand & gravel			Lke-CIR	IM-1243
C & S Contractors, Inc. P.O. Box 42459 Cincinnati, OH 45242 513-791-7747 Raymond A. Conn, pres.	C & S Contractors, Inc. (356)	Warren	sand & gravel			Wan-47	IM-846
Canton Aggregate Div. of Central Allied Enterprises, Inc. P.O. Box 80449 Canton, OH 44708-0449 216-477-6751 John A. Woodhall, Jr., pres.	Canton Aggregate (318) Canton Aggregate (319) Canton Aggregate (631)	Stark Stark Stark	sand & gravel sand & gravel sand & gravel	606,773 229,780 42,833	606,773 224,108 27,000	Sk-681 Sk-689 Sk-CA	IM-164 IM-173 IM-1234
Carter & Carter, Inc. P.O. Box 266 Miamisburg, OH 45343-0266 513-239-0554 Charles V. Carter, pres.	Carter & Carter, Inc. (561) (157)	Montgomery	sand & gravel clay	974	974	My-CW	IM-878
Cashen, Inc. 1225 Dock Rd. Madison, OH 44057 216-428-1148 Andy Cashen, owner	Cashen, Inc. (597)	Lake	sand & gravel			Lke-C	IM-1215
Cedar Heights Clay Co. Division of Resco Products, Inc. P.O. Box 295 Oak Hill, OH 45656-0295 614-682-7794 William T. Tredennick, pres.	Gallia Red Sand (507) Shumate/Alban (21) Cedarloo/Jenkins/Greer (22) Katie Walke (91) Sadler (145) (145)	Gallia Jackson Jackson Jackson Jackson	sand & gravel clay clay clay clay shale	458 22,850 35,292 6,751	458 22,850 35,292 6,751	Ga-507 Jkn-1001 Jkn-1007 Jkn-CH Jkn-CH1	IM-1074 IM-19 IM-24 IM-1060 IM-1182

1994 OHIO ALPHABETICAL DIRECTORY OF INDUSTRIAL-MINERAL MINE OPERATORS – Continued

Name, address, telephone number, and president/owner/manager of company	Name of mine (and map location number)	County	Commodity	1994 sales (tons)	1994 production (tons)	State mine number	Division of Reclamation permit number
Celotex Corp. P.O. Box 280 Port Clinton, OH 43452 419-734-3153 Larry Schultz, gen. mgr.	American #2 (1)	Ottawa	gypsum	259,105	259,105	Oa-2	IM-344
Center West Enterprise, Inc. 4901 W. Market St. Leavittsburg, OH 44430 216-898-5394 Andrew B. Polivka, pres.	Center West Enterprise, Inc. (611)	Trumbull	sand & gravel			Tl-C	IM-1190
Central Ohio Coal Co. P.O. Box 98 Cumberland, OH 43732-0098 614-962-2013 Gary Dimmerling, gen. mgr.	Horse Run Stone Quarry (73) Meigs Creek (165) Windy Hill (166)	Morgan Morgan Noble	limestone limestone limestone	52,140 90,115	52,140 90,115	Mon-600 Mon-C Ne-C	D-1034 IM-1010 D-0820
Jeff Chaney P.O. Box 466 Killbuck, OH 44637 216-276-2444 Jeff Chaney, owner	Spring Run Gravel (416) (111)	Holmes	sand & gravel shale	16,045	16,045	Hs-96	IM-997
Charlestown Sand & Gravel, Inc. 7845 State Rte. 5 Ravenna, OH 44266 216-296-9233 Yale Stuble, pres.	Charlestown Sand & Gravel, Inc. (259)	Portage	sand & gravel	37,630	37,630	Pe-17	IM-123
Chattin Concrete 874 Higby Rd. Chillicothe, OH 45601-8225 614-947-5227 Jeffery Chattin, owner	Chattin Concrete (253)	Pike	sand & gravel			Pke-23	IM-242
Chesterhill Stone Co. 773 East State Rte. 60 NE P.O. Box 599 McConelsville, OH 43756 614-962-5621 Carl & Fred Price, owners	Plant #2 (240) Graham Farm (563) Plant #1 (75)	Morgan Morgan Muskingum	sand & gravel sand & gravel limestone	255,499 884,048	250,749 838,410	Mon-588 Mon-CSC Mum-106	IM-35 IM-1178 IM-297
Chesterville Sand & Gravel Co., Inc. State Rte. 95 E P.O. Box 51 Chesterville, OH 43317 419-768-3369 Carrol D. Gleason, pres.	Chesterville Sand & Gravel Co., Inc. (242)	Morrow	sand & gravel	131,045	131,045	Mw-10	IM-258
Chillicothe Sand & Gravel Co. 1177 Hopetown Rd. Chillicothe, OH 45601 614-775-3751 Don E. Mill, pres.	Chillicothe Sand & Gravel Co. (490)	Ross	sand & gravel	254,572	289,636	Rs-27	IM-1098
Christman Quarry 47278 Swazey Rd. Lewisville, OH 43754 614-838-2475 Gerald L. Christman, owner	Christman Quarry (163)	Monroe	limestone	79,695	79,695	Me-C	IM-1088
Clark Clay Co. 6918 Township Rd. 310 Millersburg, OH 44654 216-674-5150 Dwight S. Clark, owner	Clark Clay Co. (17)	Holmes	clay	3,528	1,710	Hs-56	
Cleveland Quarries, L.P. P.O. Box 261 Amherst, OH 44001-0261 216-986-4501 Walter Molnor, pres.	Birmingham Quarry (14) Amherst Quarries (27)	Erie Lorain	sandstone sandstone	517 1,306	517 1,306	Ee-21 Ln-3	IM-416 IM-415
M. J. Coates Construction Co. P.O. Box 231 Centerville, OH 45459 513-433-1581 Martin J. Coates, owner	M. J. Coates Construction Co. (548)	Greene	sand & gravel	60,743	60,743	Ge-47	IM-751

1994 OHIO ALPHABETICAL DIRECTORY OF INDUSTRIAL-MINERAL MINE OPERATORS — Continued

Name, address, telephone number, and president/owner/manager of company	Name of mine (and map location number)	County	Commodity	1994 sales (tons)	1994 production (tons)	State mine number	Division of Reclamation permit number
Cochran Transportation Services, Inc. P.O. Box 578 Athens, OH 45701 614-593-3906 Charles W. Cochran, pres.	Cochran Transportation Services, Inc. (458) (87)	Athens	sand & gravel clay	61,998 2,987	61,998 2,987	As-595	IM-1083
Boone Coleman Route 5, Box 292 Portsmouth, OH 45662 614-858-6661 Boone Coleman, pres.	Boone Coleman (576)	Scioto	sand & gravel	4,930	4,930	So-B	IM-705
Con-Ag, Inc. 16672 County Rd. 66A N St. Marys, OH 45885 419-394-8870 Robert E. Hirschfeld, pres.	Con-Ag, Inc. (10)	Auglaize	limestone	207,740	216,327	Ae-31	IM-744
Conotton Valley Quarries Co. P.O. Box 207 Sherrodsville, OH 44675 614-269-3481 Nick J. Puskarich, pres.	Conotton Valley Quarries Co. (1)	Carroll	sandstone			Cl-102	IM-278
Craigton Shale Co. 2880 E. Easton Rd. Creston, OH 44217 216-435-6535 Leonard D. Schemrich, owner	Craigton Shale Co. (165)	Wayne	shale	1,735	1,735	We-25	IM-1209
Crates Excavating 14628 State Rte. 31 Kenton, OH 43326 419-675-1558 J. Roger Crates, owner	Crates #2 (469)	Hardin	sand & gravel			Hdn-C	IM-1081
Cremeans Concrete & Supply Georges Creek Rd. P.O. Box 475 Gallipolis, OH 45631 614-446-1142 Frank A. Cremeans, pres.	Cremeans Concrete & Supply (440)	Gallia	sand & gravel	3,461	3,461	Ga-626	IM-1046
Crosby Gravel 9570 State Rte. 128 Harrison, OH 45030 513-738-0077 Joseph Prus, pres.	Miamitown Sand & Gravel (121)	Hamilton	sand & gravel	450	450	Hmn-44	IM-120
R. A. Cruise Sand & Gravel, Inc. 7639 State Rte. 14 Ravenna, OH 44266 216-296-4087 Larry R. Cruise, pres.	R. A. Cruise Sand & Gravel, Inc. (261)	Portage	sand & gravel	73,343	73,343	Pe-45	IM-139
Cunningham Asphalt Paving, Inc. P.O. Box 370 Wheelersburg, OH 45694 614-574-6184 Karl Cunningham, pres.	Cunningham Pit (304)	Scioto	sand & gravel			So-83	IM-211
D. & D. Mining Co. 3379 E. Garfield Rd. New Springfield, OH 44443 216-549-3127 Donald Thompson, pres.	D. & D. Mining Co. (57) (164)	Columbiana	sandstone shale	980	980	Ca-888	IM-1181
	D. & D. Strip (130)	Columbiana	clay	16,597	16,597	Ca-348	IM-976
D & D Sand Bank Rte. 7 Box 473 South Point, OH 45680 614-377-4765 Eileen Pemberton, owner	D & D Sand Bank (388)	Lawrence	sand & gravel	900	0	Le-445	IM-928
D & K Materials, Inc. 3141 Congress Lake Rd. Mogadore, OH 44260 216-678-2411 Kimberly Ebbe, pres.	D & K Materials, Inc. (568)	Portage	sand & gravel	14,028	12,741	Pe-101	IM-1154

1994 OHIO ALPHABETICAL DIRECTORY OF INDUSTRIAL-MINERAL MINE OPERATORS — Continued

Name, address, telephone number, and president/owner/manager of company	Name of mine (and map location number)	County	Commodity	1994 sales (tons)	1994 production (tons)	State mine number	Division of Reclamation permit number
D & W Sand & Gravel 10677 Wren Rd. Mechanicsburg, OH 43044 513-834-2548 Dale Potter, owner	D & W Sand & Gravel (49)	Champaign	sand & gravel	6,344	6,344	Cpn-21	IM-616
Darby Gravel Co. 12504 State Route 762 Orient, OH 43146 614-877-4184 Louis Johnson, pres.	Darby Gravel Co. (564) (139)	Pickaway	sand & gravel clay	5,676	5,676	Pky-D	IM-1150
Davis Sand & Gravel 311 Mt. Zion Rd. Lancaster, OH 43130 614-687-1876 Richard P. Davis, owner	Davis Sand & Gravel (91)	Fairfield	sand & gravel	3,927	3,927	Fd-12	IM-451
Davon, Inc. 4281 Roush Rd. Hillsboro, OH 45133 513-393-4211 John B. Patton, pres.	Plum Run Stone Division (1) Davon, Inc. (184)	Adams Adams, Brown	limestone limestone	1,864,937	1,826,953	Ads-1 Ads-BN	IM-237 IM-1195
	Highland Stone Division (41)	Highland	limestone	887,738	854,844	Hd-2	IM-230
DeMilta Sand & Gravel, Inc. 921 Erie Rd. Eastlake, OH 44094 216-942-2015 Nick DeMilta, pres.	DeMilta Sand & Gravel, Inc. (598)	Lake	sand & gravel	350	350	Lke-D	IM-1187
Demmy Construction, Inc. 4324 Fairfield Pike Springfield, OH 45502 513-325-9429 Daniel E. Demmy, pres.	Kieffer Pit (385)	Clark	sand & gravel	33,636	33,636	Ck-501	IM-340
Demmy Sand & Gravel 4324 Fairfield Pike Springfield, OH 45502 513-325-8840 Woodrow Demmy, owner	Demmy Sand & Gravel (54)	Clark	sand & gravel	9,054	9,054	Ck-502	IM-375
Dennis Clay Co. 11123 State Rte. 37 East New Lexington, OH 43764 614-342-5473 Tom L. Dennis, owner	Ohio Power (124) (124)	Muskingum	clay shale	19,284 5,106	19,284 5,106	Mum-903	IM-1115
	Baker (176)	Muskingum	clay shale			Mum-DCC	IM-1220
	Dennis Clay Co. (108)	Perry	clay shale	12,180 8,800	12,180 8,800	Py-338	IM-1092
	Snake Hollow (67) (159)	Perry	sandstone clay	2,907	2,907	Py-DCC	IM-1192
A. J. Diana Sons, Inc. 1916 Erie Ave. NW P.O. Box 488 Massillon, OH 44648 216-832-5904 Virgil V. Diana, pres.	Neidert Pit (320)	Stark	sand & gravel	6,175	6,115	Sk-694	IM-858
Dingledine Basic Materials, Inc. 2304 Somerville Rd. P.O. Box 86 Somerville, OH 45064 513-726-5258 Gerald Dingledine, owner	Dingledine Basic Materials, Inc. (32)	Butler	sand & gravel	128,390	128,390	Br-50	IM-739
Dome Minerals, Inc. 15601 Emerick Rd. Kensington, OH 44427 216-223-1413 Fred A. Rogers, pres.	Dome Minerals, Inc. (79)	Columbiana	shale	8,167	8,167	Ca-947	IM-935
Don's Dozer Service, Inc. 8200 Seasons Rd. Streetsboro, OH 44241 216-626-5147 Donald R. McElravy, pres.	Don's Dozer Service, Inc. (529)	Portage	sand & gravel	1,397	1,397	Pe-96	IM-792
James E. Downard 1885 Mt. Zwingli Rd. Bremen, OH 43107 614-569-7849 James E. Downard, owner	James E. Downard (541) (155)	Fairfield	sand & gravel clay	391 165	0 165	Fd-16	IM-1156

1994 OHIO ALPHABETICAL DIRECTORY OF INDUSTRIAL-MINERAL MINE OPERATORS – Continued

Name, address, telephone number, and president/owner/manager of company	Name of mine (and map location number)	County	Commodity	1994 sales (tons)	1994 production (tons)	State mine number	Division of Reclamation permit number
Dravo Basic Materials Co., Inc. 5253 Wooster Rd. Cincinnati, OH 45226 513-321-2700 H. Donovan Ross, pres.	Fairfield Plant (33) Ross Plant (34) Cleves Plant (126) Camp Dennison Plant (127) Newtown Plant (128) Cleves Plant (130) Cleves Plant (131) Newtown Plant (128) Dravo Basic Materials Co., Inc. (468) Lynchburg Plant (175) Apple Grove Plant (209) South Lebanon Plant (352)	Butler Butler Hamilton Hamilton Hamilton Hamilton Hamilton Hamilton Hamilton Highland Meigs Warren	sand & gravel sand & gravel sand & gravel sand & gravel sand & gravel sand & gravel sand & gravel sand & gravel sand & gravel limestone sand & gravel sand & gravel	1,157 694,848 104,508 799,051 557,199 ² 388,590 43,297 1,159	0 636,332 116,118 794,634 569,784 736,782 633,171 0	Br-14 Br-29 Hmn-3 Hmn-5 Hmn-11 Hmn-64 Hmn-68 Hmn-70 Hmn-D Hd-D Ms-205 Wan-41 ⁴	IM-147 IM-149 IM-137 IM-148 IM-133 IM-821 IM-747 IM-133 IM-1079 IM-1170 IM-30 IM-629
Dry Creek Gravel Co. 2097 Mt. Vernon Rd. Newark, OH 43055 614-366-3333 Gail Wolfe, pres.	Plant #2 (176) Plant #3 (177)	Licking Licking	sand & gravel sand & gravel	49,412 139,369	47,480 133,380	Lg-31 Lg-DC	IM-246 IM-354
C. E. Duff & Son, Inc. P.O. Box 295 Huntsville, OH 43324 513-686-2488 James E. Duff, pres.	Forest Quarry (156) Portable (444) C. E. Duff & Son, Inc. (50) Duff Sand Co. (182) C. E. Duff & Son, Inc. (420) C. E. Duff & Son, Inc. (183)	Hardin Logan Logan Logan Logan Logan	limestone sand & gravel limestone sand & gravel sand & gravel sand & gravel	5,084 299,996 92,174 26,160	5,084 299,996 92,174 26,160	Hdn-S Lgn-12 Lgn-15 Lgn-31 Lgn-36 Lgn-39	IM-1034 IM-1071 IM-453 IM-454 IM-1007 IM-887
E. A. Construction, Inc. 7013 S. Funk Rd. Shreve, OH 44676 216-496-2531 Ellis Aylsworth, pres.	E. A. Construction, Inc. (613)	Wayne	sand & gravel	80	80	We-24	IM-1211
E.M.A.I. Corp. dba ESSROC Materials, Inc. P.O. Box 5250 Poland, OH 44514 216-536-6275 Philippe Milliet, CEO	Bessemer Pit (57) (34) Carbon Pit (162) (107) (107)	Mahoning Mahoning	limestone shale limestone clay shale	925,666 58,505 1,188,570 63,947	925,666 58,505 1,188,570 63,947	Mg-608 Mg-EM	IM-4 IM-1056
East Fairfield Coal Co. 10900 South Ave. P.O. Box 217 North Lima, OH 44452 216-549-2165 R. E. Mackall, pres.	Withers (602) (171) (53) (118)	Mahoning	sand & gravel limestone sandstone clay	8,966	8,966	Mg-631	IM-1103
Easton Excavating, Inc. 1373 Route 322E Orwell, OH 44076 216-422-3500 Tim Easton, pres.	Easton Excavating, Inc. (618)	Ashtabula	sand & gravel			Asa-23	IM-1237
Easton Resources, Inc. 1373 Route 322E Orwell, OH 44076 216-422-3500 Milven W. Easton, pres.	Brockway (592)	Ashtabula	sand & gravel	1,040	1,040	Asa-22	IM-1214
Eaton Sand & Gravel Co. 11641 Mosteller Rd. Cincinnati, OH 45241 513-771-0820 Charles Bucklew, pres.	Eaton Sand & Gravel Co. (132)	Hamilton	sand & gravel	3,000	3,000	Hmn-46	IM-396
R. A. Eberts Co., Inc. P.O. Box 109 Jackson, OH 45640 614-682-3506 Phil A. Bowman, pres.	Diamond Stone (9) (128)	Athens	limestone clay	239,376 529	239,376 529	As-533	IM-17
David E. Edington P.O. Box 282 Frankfort, OH 45628 614-998-5328 David E. Edington, owner	David E. Edington (573)	Ross	sand & gravel	2,992	2,992	Rs-E	IM-1168

²Information for Hmn-64 is included with Hmn-3.³Information for Hmn-70 is reported under Hmn-11.⁴See also Carl E. Oeder & Sons Sand & Gravel.

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Name, address, telephone number, and president/owner/manager of company	Name of mine (and map location number)	County	Commodity	1994 sales (tons)	1994 production (tons)	State mine number	Division of Reclamation permit number
Elm Spring Farm 938 State Rte. 207 Chillicothe, OH 45601 614-775-5525 Joanna J. Haskins, owner	Elm Spring Farm (297)	Ross	sand & gravel			Rs-26	IM-922
Embros, Inc. 8320 N. State Rte. 123 Franklin, OH 45005 513-746-6121 Ronald Martz, pres.	Embros, Inc. (589)	Warren	sand & gravel	103,633	112,771	Wan-7	IM-151
Erie Blacktop, Inc. P.O. Box 2308 Sandusky, OH 44870 419-625-7374 Dean Wikel, pres.	Erie Blacktop Quarry (24) Erie Blacktop Sand & Gravel Pit (417)	Erie Huron	limestone sand & gravel	77,297 387	218,472 243	Ee-27 Hrn-16	IM-608 IM-975
Erie Materials, Inc. 4507 Tiffin Ave. Sandusky, OH 44870 419-625-7374 Dean Wikel, pres.	Erie Materials, Inc. (83)	Erie	sand & gravel			Ee-18	IM-676
Erie Sand & Gravel Co. P.O. Box 179 Erie, PA 16512-0179 814-453-6721 Sidney E. Smith, Jr., pres.	Erie Sand & Gravel Co. (1)	Lake Erie	sand & gravel (dredged)	33,116	33,116	Ee-D	
John James Estes & Assoc., Inc. P.O. Box 30912 Columbus, OH 43230 614-252-0086 Johnny E. Estes, pres.	John James Estes & Assoc., Inc. (160)	Pike	clay	20,000	20,000	Pke-J	IM-1194
Craig Fankhauser 13 Knollwood Perrysburg, OH 43551 419-535-5931 Craig Fankhauser, owner	Craig Fankhauser (557)	Lucas	sand & gravel	4,109	4,109	Ls-F	IM-1160
Feikert Sand & Gravel, Inc. 6971 County Rd. 189 Millersburg, OH 44654-9186 216-674-0038 Lynn O. Feikert, pres.	Feikert Sand & Gravel, Inc. (154) Feikert Sand & Gravel, Inc. (624)	Holmes Holmes	sand & gravel sand & gravel	122,322	122,322	Hs-511 Hs-F	IM-1048 IM-1240
Fenner Sand & Gravel, Inc. 7131 W. Fenner Rd. Ludlow Falls, OH 45339 513-698-7048 Robert P. Snead, pres.	Woodville Concrete Corp. (222)	Miami	sand & gravel	188,000	188,000	Mi-4	IM-472
Fleckenstein Farm Gravel Pit 11251 State Rte. 66 Minster, OH 45865 513-295-2417 Ferd J. Fleckenstein, owner	Fleckenstein Farm Gravel Pit (310)	Shelby	sand & gravel	1,544	1,544	Shy-12	IM-528
Fleming Construction Co., Inc. P.O. Box 31 Marion, OH 43301-0031 614-494-2177 Gerald E. Fleming, pres.	Fleming Construction Co., Inc. (423)	Marion	sand & gravel			Mn-19	IM-990
Flesher Sand & Gravel, Inc. 3322 Clark Mill Rd. Norton, OH 44203 216-745-9239 James E. Flesher, pres.	Flesher Sand & Gravel, Inc. (327)	Summit	sand & gravel	62,800	62,800	St-52	IM-900
David L. Florence 1617 Staunton Ave. Parkersburg, WV 26101 304-428-3035 Joan D. Florence, owner	David L. Florence (163)	Washington	clay	4,052	4,052	Wn-F	IM-128
Foureman's Sand & Gravel, Inc. 2791 Wildcat Rd. Greenville, OH 45331 513-548-1718 Gary B. Foureman, pres.	Foureman's Sand & Gravel, Inc. (80)	Darke	sand & gravel	47,937	41,858	Dke-4	IM-433

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Name, address, telephone number, and president/owner/manager of company	Name of mine (and map location number)	County	Commodity	1994 sales (tons)	1994 production (tons)	State mine number	Division of Reclamation permit number
Fox Stone Products, Inc. P.O. Box 299 Put-in-Bay, OH 43456 419-285-3025 Richard H. Fox, owner	Fox Stone Products, Inc. (180)	Ottawa	limestone	8,000	8,000	Oa-18	IM-635
The France Stone Co. 8130 Brint Rd. P.O. Box 278 Sylvania, OH 43560-0278 419-882-0123 Brian J. Wheeler, pres.	Waterville (52) Sylvania (53) Paulding (86) Flat Rock (107) Bloomville (108) Custar (129)	Lucas Lucas Paulding Seneca Seneca Wood	limestone limestone limestone limestone limestone limestone	448,301 1,079,333 285,021 1,383,340 478,598 109,283	583,855 1,033,719 323,053 1,892,321 483,270 59,545	Ls-1 Ls-3 Pg-7 Sa-1 Sa-3 Wd-5	IM-575 IM-580 IM-347 IM-349 IM-473
Friendsville Sand, L.P. 9601 Avon Lake Rd. Lodi, OH 44254 216-948-4338 Richard L. Rothel, pres.	Friendsville Sand, L.P. (558)	Medina	sand & gravel	67,311	67,311	Ma-23	IM-1177
Lloyd Fry P.O. Box 1515 Piqua, OH 45356 513-773-1541 Lloyd Fry, pres.	Lloyd Fry (390)	Miami	sand & gravel			Mi-T	IM-696
Frye Sand & Gravel, Inc. 3049 S. Denmark Rd. P.O. Box 3 Dorset, OH 44032 216-858-2627 Harold L. Frye, owner	Frye Sand & Gravel, Inc. (9)	Ashtabula	sand & gravel	1,831	1,831	Asa-10	IM-198
G & M Supply, Inc. dba Clinton Stone, Inc. 1203 N. Pennsylvania Ave. P.O. Box 468 Wellston, OH 45692 614-384-5659 Bonny A. Huffman, pres.	Sands Hill (124)	Vinton	limestone			Vn-174	D-0309
Ganges Gravel 153 North Gambel St. P.O. Box 42 Shelby, OH 44875 419-342-5361 J. J. Scott, owner	Ganges Gravel (289)	Richland	sand & gravel	703	703	Rd-18	IM-670
John L. Garber Materials, Inc. Rte. 8 Lexington, OH 44904 419-884-1567 John L. Garber, pres.	John L. Garber Materials, Inc. (290)	Richland	sand & gravel	354,233	362,700	Rd-14	IM-436
Al Gasser Excavating, Inc. 1308 Gasser Rd. NW Dover, OH 44622 216-343-9407 Allen L. Gasser, pres.	Al Gasser Excavating, Inc. (587)	Tuscarawas	sand & gravel	5,125	5,125	Ts-2049	IM-1151
Gaston Bowling, Inc. P.O. Box 330 Oxford, OH 45056 513-523-8805 Gaston Bowling, pres.	Gaston Bowling, Inc. (37)	Butler	sand & gravel	1,612	720	Br-40	IM-493
Geiger Sand & Gravel 173 James Rd. Gahanna, OH 43230 614-759-6511 Steve Geiger, owner	Alexandria Pit (600)	Licking	sand & gravel	22,510	41,410	Lg-W	IM-1213
General Clay Products Corp. P.O. Box 236 Baltic, OH 43804-0236 216-897-7171 Harold B. Epler, Jr., pres.	Drescher Pit (6) (6) Troyer Pit (18)	Coshocton Holmes	clay shale shale	3,444 10,763	3,444 10,763	Cn-787 Hs-77	IM-610 IM-545
General Clay Products Corp. P.O. Box 550 Logan, OH 43138 614-385-5616 Harold B. Epler, Jr., pres.	General Clay Products Corp. (12) (12) General Clay Products Corp. (110)	Hocking Hocking	clay shale shale	24,850 9,534 3,300	24,850 9,534 3,300	Hg-205 Hg-330	IM-21 IM-1013

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Name, address, telephone number, and president/owner/manager of company	Name of mine (and map location number)	County	Commodity	1994 sales (tons)	1994 production (tons)	State mine number	Division of Reclamation permit number
General Clay Products Corp. P.O. Box 340 Wadsworth, OH 44281 216-335-1515 Harold B. Epler, Jr., pres.	General Clay Products Corp. (37)	Medina	shale	18,194	18,194	Ma-6	IM-455
General Clay Products Corp. 1445 Goodale Blvd. Columbus, OH 43212 216-335-1515 Stephen Markovich, gen. mgr.	Plant #7 (73)	Wyandot	clay			Wt-7	IM-407
GenLime Group, L.P. P.O. Box 158 Genoa, OH 43430 419-855-8336 P. J. Senechal, pres.	GenLime Group, L.P. (85)	Ottawa	limestone	703,477	313,261	Oa-1	IM-292
Gerken Materials, Inc. P.O. Box 607 Napoleon, OH 43545 419-533-2421 Julian A. Gerken, pres.	Gerken Materials, Inc. (147) Gerken Materials, Inc. (614)	Henry Williams	sand & gravel sand & gravel	173,572	173,572	Hy-5 Ws-20	
Gibson Sand & Gravel Co. 1385 Knorr Rd. Galion, OH 44833 419-468-5527 Arthur T. Gibson, owner	Gibson Sand & Gravel Co. (75)	Crawford	sand & gravel	1,084	1,084	Cd-3	IM-693
Glen-Gery Corp. P.O. Box 398 Caledonia, OH 43314 419-845-3321 Evan Davis, plant supt.	Glen-Gery Corp. (36)	Marion	shale	152,681	152,681	Mn-7	IM-309
Golden Crescent Construction, Inc. 1104 Milan Ave. Amherst, OH 44001 216-967-6822 Samuel T. Bartlett, pres.	Golden Crescent Construction, Inc. (66)	Lorain	sandstone			Ln-14	IM-1205
David B. Good 10442 W. Easton Rd. West Salem, OH 44287 419-846-3912 David B. Good, owner	David B. Good (508)	Ashland	sand & gravel	2,674	2,574	Ald-G	IM-1121
Good Builders 35280 Linton Rd. Logan, OH 43138 614-385-5872 Steve Good, owner	Good Builders (596) (171)	Hocking	sand & gravel clay	569 154	569 154	Hg-G	IM-1201
Goodwin Sand & Gravel, Inc. 126 S. Norton St. Mt. Vernon, OH 43050 614-392-7971 Thomas J. Mill, plant mgr.	Goodwin Sand & Gravel, Inc. (160)	Knox	sand & gravel	38,032	0	Kx-7	IM-235
Gottron Bros. Co. 100 South Stone St. Fremont, OH 43420 419-332-5281 Harry P. Gottron, Jr., v. pres.	Gottron Bros. Co. (101)	Sandusky	limestone	114,040	68,607	Sy-5	IM-259
James D. Graham 2036 State Route 725 Spring Valley, OH 45370 513-293-1165 James D. Graham, owner	James D. Graham (550)	Greene	sand & gravel			Ge-G	IM-655
The Gravel Co. 325 Clark Rd. P.O. Box 15501 Cincinnati, OH 45215 513-761-4980 Roy B. Schweitzer, pres.	Cleves (141)	Hamilton	sand & gravel			Hmn-28	IM-353
The Gravel Co. 151 Seven Mile Ave. New Miami, OH 45011 513-761-4980 Roy B. Schweitzer, pres.	New Miami Pit (42)	Butler	sand & gravel	34,028	34,028	Br-3	IM-719

1994 OHIO ALPHABETICAL DIRECTORY OF INDUSTRIAL-MINERAL MINE OPERATORS – Continued

Name, address, telephone number, and president/owner/manager of company	Name of mine (and map location number)	County	Commodity	1994 sales (tons)	1994 production (tons)	State mine number	Division of Reclamation permit number
Green Basin Coal, Inc. Rte. 1 Box 49C Strasburg, OH 44680 216-878-7740 Jerry Kohl, pres.	Blackhawk (169) (63) (103) (103)	Tuscarawas	limestone sandstone clay shale	56 130	56 130	Ts-2024	IM-1087
Green Oaks Potting Products, Inc. 2222 Lake Rockwell Rd. P.O. Box 979 Ravenna, OH 44266 216-296-2157 John A. Lyon, pres.	Green Oaks (7) (451) (161)	Portage	peat sand & gravel clay	2,609 292 275	2,609 292 275	Pe-89	IM-1142
Gregory Materials Co. 14133 U.S. Rte. 23 N Waverly, OH 45690 614-947-5559 Ernest Gregory, owner	Plant #1 (254)	Pike	sand & gravel	2,991	2,991	Pke-30	IM-786
Gregory Stone Co., Inc. 3244 S. Davis Rd. Ludlow Falls, OH 45339 513-275-7455 William T. Gregory, Jr.	Gregory Quarry (65)	Miami	limestone	391,359	391,359	Mi-16	IM-414
H. T. Griffin Excavating, Inc. 3950 S. Berkey Southern Swanton, OH 43558 419-826-0230 Henry T. Griffin, owner	H. T. Griffin Excavating, Inc. (472)	Lucas	sand & gravel			Ls-G	IM-1090
Grimes Excavating Rte. 3 Box 121 New Matamoras, OH 45767 614-865-2267 Lewis Grimes, owner	Grimes Excavating (533)	Washington	sand & gravel	45,000	45,000	Wn-1008	IM-1111
Gwin Contracting Co. P.O. Box 205 Columbiana, OH 44408 216-482-2442 Lyle D. Gwin, pres.	Gwin Contracting Co. (30)	Mahoning	sandstone	1,414	1,414	Mg-62	IM-599
H & H Utilities Co. 7307 S. Kessler-Frederick Rd. West Milton, OH 45383 513-223-6752 Gerald Hochwalt, pres.	H & H Gravel (229)	Montgomery	sand & gravel	2,657	2,657	My-68	IM-646
J. M. Hamilton & Sons Co., Inc. 1974 Marion-Bucyrus Rd. Marion, OH 43302 614-382-2189 O. E. Hamilton, pres.	J. M. Hamilton & Sons Co., Inc. (59)	Marion	limestone	130,481	130,481	Mn-2	IM-423
Hardin Quarry Co., Inc. 12484 State Rte. 701 Kenton, OH 43326 419-675-1327 Richard Pees, pres.	Hardin Quarry Co., Inc. (38)	Hardin	limestone	168,600	168,600	Hdn-2	IM-443
Norman Harpster 16069 State Rte. 235 Belle Center, OH 43310 513-464-5623 Norman Harpster, owner	Norman Harpster (553)	Hardin	sand & gravel	250	250	Hdn-H	IM-864
Harrison Sand & Gravel Co. 10980 Campbell Rd. Harrison, OH 45030 513-637-5174 Donald Gauck, v. pres.	Harrison Sand & Gravel Co. (135)	Hamilton	sand & gravel	87,232	105,000	Hmn-17	IM-295
Haubeil & Sons Asphalt & Materials, Inc. 379 Seney Rd. Chillicothe, OH 45601 614-773-6358 George Haubeil, pres.	Haubeil & Sons Asphalt & Materials, Inc. (491)	Ross	sand & gravel	45,115	45,115	Rs-H	IM-1052

1994 OHIO ALPHABETICAL DIRECTORY OF INDUSTRIAL-MINERAL MINE OPERATORS — Continued

Name, address, telephone number, and president/owner/manager of company	Name of mine (and map location number)	County	Commodity	1994 sales (tons)	1994 production (tons)	State mine number	Division of Reclamation permit number
Haueter Sand & Gravel, Inc. P.O. Box 206 Chardon, OH 44024 216-286-9482 Donald H. Haueter, pres.	Haueter Sand & Gravel, Inc. (108) Haueter Sand & Gravel, Inc. (545)	Geauga Geauga	sand & gravel sand & gravel	276,207	276,207	Gea-29 Gea-H	IM-215 IM-510
Heer Excavating, Inc. 7381 State Route 66 Archbold, OH 43502 419-445-3415 Daniel E. Heer, pres.	Mason Pit (634)	Williams	sand & gravel	27,503	27,503	Ws-22	IM-1222
Heiser Sand & Gravel Co. P.O. Box 2491 North Canton, OH 44720 216-499-8201 Richard L. Heiser, owner	Heiser Sand & Gravel Co. (323) Heiser Sand & Gravel Co. (608) Heiser Sand & Gravel Co. (609)	Stark Stark Stark	sand & gravel sand & gravel sand & gravel	46,794 32,209 65,000	46,794 32,209 65,000	Sk-688 Sk-HS Sk-HS1	IM-763 IM-1193 IM-1203
Paul N. Herdman P.O. Box 36 Lebanon, OH 45036 513-233-5555 Paul N. Herdman, pres.	Paul N. Herdman (429)	Warren	sand & gravel	6,000	6,000	Wan-46	IM-679, IM-842
Hidden Harbour Partners 6725 West Central Ave. Toledo, OH 43617 419-841-2980 Robert Dame & Richard Moses, partners	Centennial Rd. Pit (601)	Lucas	sand & gravel	147,864	147,864	Ls-H	IM-1217
Hillcrest Coal, Ltd. 190 S. Main St. Magnolia, OH 44643 216-866-9388 Kermit & Richard James, Jr., partners	Hillcrest Coal, Ltd. (102)	Stark	clay			Sk-HC	IM-1037
Hillsdale Sand & Gravel, Inc. P.O. Box 223 Archbold, OH 43502 419-445-1015 Dean Miller, pres.	Hillsdale Sand & Gravel, Inc. (82)	Defiance	sand & gravel	16,436	0	De-2	IM-765
Hilltop Aggregate, Inc. P.O. Box 362 Mogadore, OH 44260 216-644-3274 Robert W. West, pres.	Hilltop Aggregate, Inc. (262)	Portage	sand & gravel	493,285	493,285	Pe-56	IM-127
Hilltop Basic Resources, Inc. One West Fourth St., Suite 1100 Cincinnati, OH 45202-3615 513-878-8631 John Steele, Jr., pres.	Fairborn Aggregate Plant (112) West Carrollton Aggregate Plant (232)	Clark, Greene Montgomery	sand & gravel sand & gravel	694,670 989,315	549,260 661,351	Ge-4 My-19	IM-394 IM-401, IM-916
Hilltop Basic Resources, Inc. dba Enon Washed Sand & Gravel Co. 1665 Enon-Donnelsville Rd. P.O. Box 363 Enon, OH 45323 513-878-8631 John Steele, Jr., pres.	Enon Washed Sand & Gravel Co. (57)	Clark	sand & gravel	410,967	322,563	Ck-3	IM-463
Hocking Valley Concrete, Inc. 35255 Hocking Dr. Logan, OH 43138 614-385-2165 William G. Vaughn, pres.	Hocking Valley Concrete, Inc. (151)	Hocking	sand & gravel			Hg-262	IM-41
William A. Hoffman, Jr. 25043 State Rte. 104 Circleville, OH 43113 614-474-2002 William A. Hoffman, Jr., owner	Hoffman Pit (480)	Pickaway	sand & gravel	8,404	8,404	Pky-H	IM-1039
Tom Hollinger Excavating 2097 Hollansburg-Arcanum Rd. New Madison, OH 45346 513-996-5381 Thomas W. Hollinger, leasee	Hollinger Gravel Plant (81)	Darke	sand & gravel	880	880	Dke-10	IM-326

1994 OHIO ALPHABETICAL DIRECTORY OF INDUSTRIAL-MINERAL MINE OPERATORS – Continued

Name, address, telephone number, and president/owner/manager of company	Name of mine (and map location number)	County	Commodity	1994 sales (tons)	1994 production (tons)	State mine number	Division of Reclamation permit number
Holloway Sand & Gravel Co., Inc. P.O. Box 416 West Union, OH 45693 513-544-5524 Dan Holloway, pres.	Holloway Sand & Gravel Co., Inc. (173)	Adams	limestone			Ads-H	IM-805
Holmes Limestone Co. P.O. Box 295 Berlin, OH 44610 216-893-2721 Merle Mullet, pres.	241 Plant (44) (19) Wayne Mines (45) (143) Bolivar Mine (76)	Holmes Holmes, Wayne Stark	limestone clay shale limestone clay clay	136,163 28,384 2,402 33,608	136,163 28,384 2,402 33,608	Hs-67 Hs-79 Sk-235	IM-3, IM-768 IM-656 IM-945
Honey Creek Stone Co. P.O. Box 286 Petersburg, OH 44454 216-542-2372 Carmen Ambrosia, pres.	Honey Creek Stone Co. (56)	Mahoning	limestone	119,463	117,660	Mg-54	IM-93
Huck Farms 1162 S. Riverside Dr. McConnelsville, OH 43756 614-962-3467 Louis & Cecil Huck, partners	Huck Farms (241)	Morgan	sand & gravel			Mon-599	
Hugo Sand Co. 7055 State Rte. 43 Kent, OH 44240 216-587-2700 Dorothy M. Stroh, pres.	Hugo Sand Co. (264)	Portage	sand & gravel	281,413	281,413	Pe-10	IM-138
Hutson Road Mining Co. 1200 W. South Range Rd. North Lima, OH 44452 216-549-5214 John Curatola, partner	Hutson Road Mining Co. (539)	Columbiana	sand & gravel	1,588	1,588	Ca-351	IM-634
Hydraulic Press Brick Co. 8900 Hemlock Rd. P.O. Box 31330 Independence, OH 44131 314-621-9306 W. W. Allen, Jr., pres.	Hydraulic Press Brick Co. (7)	Cuyahoga	shale	240,211	240,211	Cya-19	IM-95
J. P. Sand & Gravel Co. 5911 Lockbourne Rd. P.O. Box 2 Lockbourne, OH 43137 614-497-0083 Richard A. Roberts, pres.	J. P. Sand & Gravel Co. (98)	Franklin	sand & gravel	531,293	531,293	Fn-52	IM-191
JTM Industries, Inc. 1000 Cobb Place Blvd., Bldg. 400 Kennesaw, GA 30144 614-622-8585 Rick Ryan, plant mgr.	JTM Clay Mine (154)	Coshocton	clay	219,840	256,590	Cn-JTM	IM-1199
Glen James & Sons, Inc. 3930 Boggs Rd. Zanesville, OH 43701 614-454-1522 Glen James, pres.	Glen James & Sons, Inc. (626)	Muskingum	sand & gravel			Mum-J	IM-1229
Janson's Soil Service, Inc. 1492 Mechanicsville Rd. Rock Creek, OH 44084 216-466-3835 Peter E. Janson, Jr., pres.	Janson's Soil Service, Inc. (10) (82) (82)	Ashtabula	sand & gravel clay shale			Asa-14	IM-563
Jarrett Sand Co. 6505 Skadden Rd. Sandusky, OH 44870 419-359-1750 James Jarrett, owner	Jarrett Sand Co. (84)	Erie	sand & gravel	2,079	2,079	Ee-29	
Jaymar, Inc. 8751 N. State Route 7 Cheshire, OH 45620 614-992-6637 Jay Hall, Jr., pres.	Jaymar, Inc. (544)	Gallia	sand & gravel	119,956	119,928	Ga-J	IM-1145

1994 OHIO ALPHABETICAL DIRECTORY OF INDUSTRIAL-MINERAL MINE OPERATORS – Continued

Name, address, telephone number, and president/owner/manager of company	Name of mine (and map location number)	County	Commodity	1994 sales (tons)	1994 production (tons)	State mine number	Division of Reclamation permit number
Jefferson Materials Co. 8505 State Rte. 14 Streetsboro, OH 44241 216-626-3816 Charles Rauh, pres.	Howitt (265)	Portage	sand & gravel	217,457	217,457	Pe-63	IM-82
Jimsco, Inc. P.O. Box 651 Dayton, OH 45449 513-233-7500 James T. McDonald & H. A. Scott, partners	Taylorville Rd. Hardfill (236)	Montgomery	sand & gravel	7,064	7,064	My-55	IM-571
Johnson Rd. Sand & Gravel 510 Johnson Rd. Kent, OH 44240 216-673-3396 Robert K. Heimann, pres.	Johnson Rd. Sand & Gravel (615)	Portage	sand & gravel	14,485	14,485	Pe-98	IM-1219
John E. Jones Construction Co. 1892 U.S. Route 52 Moscow, OH 45153 513-553-3370 John E. Jones, pres.	John E. Jones Construction Co. (537)	Clermont	sand & gravel	2,800	2,800	Ct-11	IM-665
Jones Sand & Gravel Co. 1516 Timken Rd. Wooster, OH 44691 216-264-1070 Gerald R. & James R. Jones, owners	Jones Sand & Gravel Co. (470)	Holmes	sand & gravel			Hs-J	IM-1043
Joseph Sand & Gravel, Inc. 16272 Boundary Rd. Wapakoneta, OH 45895 419-568-3787 Mary J. Joseph, owner	Joseph Sand & Gravel, Inc. (23)	Auglaize	sand & gravel	3,137	3,137	Ae-23	IM-508
K. C. C. I. P.O. Box 24 Morristown, OH 43759 614-782-1087 George Krulock, pres.	Apex (176)	Jefferson, Harrison	limestone	400	400	Jfn-K	IM-1164
Karg Sand & Gravel Co. 2088 Congress Lake Rd. Mogadore, OH 44260 216-673-1338 Thomas R. Karg, owner	Karg Sand & Gravel Co. (266)	Portage	sand & gravel	75,000	75,000	Pe-83	IM-179
Keener Sand & Clay Co. 330 Dering Ave. Columbus, OH 43207 614-444-1105 Carl F. Weiffenbach, pres.	Huron Plant (85)	Erie	sand & gravel	338	338	Ee-5	
Keeney Sand & Stone, Inc. 13320 Girdled Rd. Painesville, OH 44077 216-254-4375 Dennis Keeney, pres.	Keeney Sand & Stone, Inc. (60)	Lake	sandstone	70,749	70,749	Lke-K	IM-859
Kellstone, Inc. 3203 Harvard Ave. Newburgh Heights, OH 44105 216-883-7200 James A. Palladino, pres.	Kellstone, Inc. (174)	Erie	limestone	580,692	580,692	Ee-K	IM-727
Kieco Sand & Shale P.O. Box 77 Moxahala, OH 43761 614-342-1594 William Kiener, owner	Kieco Sand & Shale (61) (149)	Perry	sandstone shale			Py-K	IM-851
Kilbarger Construction, Inc. P.O. Box 946 Logan, OH 43138 614-385-6019 Edward Kilbarger, pres.	Kilbarger Construction, Inc. (523)	Hocking	sand & gravel			Hg-329	IM-1112

1994 OHIO ALPHABETICAL DIRECTORY OF INDUSTRIAL-MINERAL MINE OPERATORS — Continued

Name, address, telephone number, and president/owner/manager of company	Name of mine (and map location number)	County	Commodity	1994 sales (tons)	1994 production (tons)	State mine number	Division of Reclamation permit number
Kimble Clay & Limestone Co. 3596 State Route 39 NW Dover, OH 44622-9801 216-343-1226 Floyd E. Kimble, owner	Kimble Clay & Limestone Co. (117) (41) (63) (63)	Tuscarawas	limestone sandstone clay shale	63,886 86,575 88,342	63,886 86,575 88,342	Ts-1818	IM-9
King Limestone, Inc. 53681 Spencer Rd. Cumberland, OH 43732 614-638-3942 Duane King, pres.	King Limestone, Inc. (147)	Guernsey, Muskingum	limestone	255,745	255,745	Gy-309	IM-1030
Kinsman Sand & Gravel Co. P.O. Box 79 Kinsman, OH 44428 216-293-5400 Glenn B. Harnett, pres.	Kinsman Sand & Gravel Co. (593)	Ashtabula	sand & gravel	62,841	38,633	Asa-K	IM-1198
Kipp's Gravel Co., Inc. 4987 State Rte. 222 Batavia, OH 45103 513-732-1024 Melvin M. Kipp, pres.	Kipp's Gravel Co., Inc. (61)	Clermont	sand & gravel	164,493	164,493	Ct-7	IM-432
Kirby's Sand & Gravel, Inc. 4876 County Hwy. 43 Upper Sandusky, OH 43351 419-927-2260 Noble A. Kirby, owner	Kirby's Sand & Gravel, Inc. (382) Kirby's Sand & Gravel, Inc. (591)	Wyandot Wyandot	sand & gravel sand & gravel	39,254 14,485	39,254 14,485	Wt-17 Wt-K	IM-604 IM-943
Kleese Development Associates, Inc. 45 North Rd. Niles, OH 44446 216-652-5991 Robert Kleese, pres.	Kleese Development Associates, Inc. (499)	Trumbull	sand & gravel			Tl-K	IM-1101
Leonard E. Kleilein 2511 Mansfield-Lucas Rd. Lucas, OH 44843 419-524-2541 Leonard E. Kleilein, owner	Leonard E. Kleilein (629)	Richland	sand & gravel	75,130	75,130	Rd-K	IM-1232
Board of Knox County Commissioners 110 East High St. Mt. Vernon, OH 43050 216-397-1590 James Henry, engineer	Board of Knox County Commissioners (148)	Knox	shale	3,648	3,648	Kx-K	IM-870
Koch Engineering Co., Inc. Knight Division 171 Kelley Ave. Akron, OH 44306 216-724-1277 Allen R. Smalley, mgr.	Koch Engineering Co., Inc. (174)	Stark	clay	1,556	1,556	Sk-K	IM-1236
T & K Kuhnle Co. P.O. Box 375 Newbury, OH 44065 216-626-4400 Thomas Kuhnle, pres.	T & K Kuhnle Co. (518)	Geauga	sand & gravel	101,530	101,530	Gea-TK	IM-902
L & I Natural Resources, Inc. 10369 Cones Rd. Loveland, OH 45140 513-683-2045 Alvin Walker, pres.	L & I Pit & Mill (430)	Warren	sand & gravel	173,256	173,256	Wan-50	IM-1006
L & M Mineral Co. 5205 State Rte. 39 Millersburg, OH 44654 216-893-2227 John E. Ling, Jr., pres.	Evans (64) Luikert (65) Spring (170) (55) (77) (77) Rainsberg (151)	Tuscarawas Tuscarawas Tuscarawas Tuscarawas	shale clay limestone sandstone clay shale shale	4,876 15,380	4,876 15,380	Ts-1884 Ts-1914 Ts-1982	IM-6 D-0701 IM-621
Lafarge Corp. Great Lakes Region P.O. Box 160 Paulding, OH 45879 419-399-4861 Michael Rose, pres.	Paulding Quarry (87) (42)	Paulding	limestone clay	658,607 135,349	658,607 135,349	Pg-1	IM-513

1994 OHIO ALPHABETICAL DIRECTORY OF INDUSTRIAL-MINERAL MINE OPERATORS – Continued

Name, address, telephone number, and president/owner/manager of company	Name of mine (and map location number)	County	Commodity	1994 sales (tons)	1994 production (tons)	State mine number	Division of Reclamation permit number
Lake Hope Asphalt, Inc. P.O. Box 38 Nelsonville, OH 45764 614-753-1005 Francis Efaw, pres.	Lake Hope Asphalt, Inc. (21)	Athens	sand & gravel	51,575	27,023	As-1161	IM-97
Lakeside Sand & Gravel Co. 3431 Frost Rd. Mantua, OH 44255-9444 216-274-2569 Larry Kotkowski, partner	Lakeside Sand & Gravel Co. (268)	Portage	sand & gravel	276,971	276,971	Pe-40	IM-190
Lancaster Sand & Gravel Co. 3232 Logan-Lancaster Rd. SE Lancaster, OH 43130 614-687-4420 Jerry Mock, foreman	Lancaster Sand & Gravel Co. (92)	Fairfield	sand & gravel	640,847	640,847	Fd-13	IM-848
Larkin Sewer Contractors, Inc. 1427 Oldtown Valley Rd. SE New Philadelphia, OH 44663 216-339-1289 Thomas E. Larkin, pres.	Larkin Sewer Contractors, Inc. (531)	Tuscarawas	sand & gravel	1,654	0	Ts-2030	IM-1125
Latham Limestone, Inc. P.O. Box 77 Latham, OH 45646 614-493-2677 Robert Murray, pres.	Latham Limestone, Inc. (91)	Pike	limestone	335,931	337,900	Pke-13	IM-213
Leetonia Sand & Gravel Co., Inc. P.O. Box 236 Canfield, OH 44406 216-427-1015 Stephen Holowach, pres.	Leetonia Sand & Gravel Co., Inc. (463) (65)	Columbiana	sand & gravel sandstone	16,414	15,592	Ca-982	IM-1108
Bertha A. Leonard 6539 River Rd. Harrison, OH 45030 513-738-4194 Bertha A. Leonard, owner	Bertha A. Leonard (137)	Hamilton	sand & gravel	400	400	Hmn-67	IM-529
Lerkis Asphalt Co., Inc. & Subsidiary 550 Dan St. Akron, OH 44310 216-376-7560 Gus J. Lerkis, pres.	Minor Rd. Plant (328)	Summit	sand & gravel			St-39	IM-983
Letart Corp. P.O. Box 430 Gallipolis Ferry, WV 25515-0430 304-675-7516 Jon Thompson, pres.	Letart Corp. #5 (559) Letart Corp. #4 (560)	Meigs Meigs	sand & gravel sand & gravel	4,154	4,154	Ms-L Ms-308	IM-1159 IM-1174
Carroll Lifer Excavating, Inc. P.O. Box 308 Bellville, OH 44813 419-886-2548 Ralph W. Robinson, pres.	Honey Creek Sand & Gravel (489)	Richland	sand & gravel	464	464	Rd-L	IM-1086
Lingvai Peat Co. R.R. 2 01693 Rd. 8 Edgerton, OH 43517 419-298-2058 Ronald Lingvai, owner	Lingvai Peat Co. (4)	Williams	peat	117	250	Ws-17	
London Tile Co. 65 Walnut St. New London, OH 44851 419-929-1551 Sylvia Danison, pres.	Biglow (1)	Ashland	shale	1,368	1,368	Ald-1	IM-334
Loxley Aggregates, Inc. 4277 Falls Rd. Lewisburg, OH 45338 513-839-5488 Matthew L. Loxley, pres.	Loxley Aggregates, Inc. (488) (101)	Preble	sand & gravel clay	7,183 680	7,183 680	Pre-9	IM-1095

1994 OHIO ALPHABETICAL DIRECTORY OF INDUSTRIAL-MINERAL MINE OPERATORS — Continued

Name, address, telephone number, and president/owner/manager of company	Name of mine (and map location number)	County	Commodity	1994 sales (tons)	1994 production (tons)	State mine number	Division of Reclamation permit number
Luburgh, Inc. 4090 East Pike Zanesville, OH 43701 614-453-9003 Otto Luburgh, owner	Luburgh Sand Pit (410)	Muskingum	sand & gravel	12,000	12,000	Mum-267	IM-914
Lucky Sand & Gravel Co. 12018 Frost Rd. Mantua, OH 44255 216-562-6196 Bernard Udelson, pres.	Lucky Sand & Gravel Co. (570)	Portage	sand & gravel	44,330	44,330	Pe-L	IM-154
Ludowici-Celadon Co. P.O. Box 69 New Lexington, OH 43764 614-342-1995 Jerry Smith, pres.	Donnelly Pit (46)	Perry	shale			Py-212	IM-58
M & J Sand & Gravel, Inc. 130 Fourth St. Parkersburg, WV 26101 304-375-9939 Gale Wilson, pres.	M & J Sand & Gravel, Inc. (590)	Washington	sand & gravel	11,202	11,202	Wn-1010	IM-1163
	Coprolite (370)	Washington	shale sand & gravel	21,190	21,190	Wn-43	IM-61
M & M Builders Supply Co. 5820 Carbon Hill Rd. East Palestine, OH 44413 216-426-9958 Hugh Madden, owner	M & M Builders Supply Co. (47)	Columbiana	sandstone			Ca-970	IM-1024
	(106) (106)		clay shale	28,000	28,000		
Al Mackey Enterprise, Inc. 203 W. Main St. Metamora, OH 43540 419-644-6700 Al Mackey, pres.	Al Mackey Enterprise, Inc. (622)	Fulton	sand & gravel			Ftn-M	IM-1246
MacRitchie Materials, Inc. P.O. Box 90 West Millgrove, OH 43467 419-288-2790 Donald B. MacRitchie, pres.	MacRitchie Materials, Inc. (130)	Wood	limestone	177,201	177,201	Wd-1	IM-548
Marshall Quarry, Inc. 11199 State Rte. 124 Hillsboro, OH 45133 513-466-2636 Ronald L. Main, pres.	Marshall Quarry, Inc. (43)	Highland	limestone	9,041	9,041	Hd-4	IM-406
Donald Martin Contracting 1875 Roxanna-New Burlington Rd. Waynesville, OH 45068 513-862-4182 Roger J. Martin, owner	Donald Martin Contracting (403)	Greene	sand & gravel	410	410	Ge-40	IM-923
Martin Marietta Magnesia Specialties, Inc. 755 Lime Rd. Woodville, OH 43469 419-849-3111 Tim Albertson, plant acct.	Woodville Quarry (102)	Sandusky	limestone	2,316,570	1,918,339	Sy-1	IM-537
Mason's Sand & Gravel Co. 2385 Rathmell Rd. Columbus, OH 43207 614-491-3611 Gordon Masteller, pres.	Mason's Sand & Gravel Co. (100)	Franklin	sand & gravel	96,441	96,441	Fn-11	IM-234
Massillon Materials, Inc. 26 N. Cochran St. P.O. Box 499 Dalton, OH 44618 216-832-4767 Howard J. Wenger, pres.	Massillon Materials, Inc. (495)	Stark	sand & gravel	484,559	484,559	Sk-M	IM-1031
Massillon Washed Gravel Co. 6331 Blough Ave. SW P.O. Box 167 Navarre, OH 44662 216-879-2132 Thomas E. Thomas, pres.	Massillon Washed Gravel Co. (325) Massillon Washed Gravel Co. (578)	Stark Stark	sand & gravel sand & gravel	312,308	312,308	Sk-607 Sk-MW	IM-102 IM-1171

1994 OHIO ALPHABETICAL DIRECTORY OF INDUSTRIAL-MINERAL MINE OPERATORS — Continued

Name, address, telephone number, and president/owner/manager of company	Name of mine (and map location number)	County	Commodity	1994 sales (tons)	1994 production (tons)	State mine number	Division of Reclamation permit number
Maxville Quarries, Inc. 7957 State Rte. 668 S Logan, OH 43138 614-385-7087 David J. McCort, pres.	Maxville Quarries, Inc. (89) Maxville Quarries, Inc. (168)	Perry Perry	limestone limestone	218,569 215,301	44,543 215,301	Py-235 Py-343	IM-11, IM-515 IM-1061
McCarthy Stone Quarry 6326 County Rd. 61 Upper Sandusky, OH 43351 419-294-2611 Charles H. McCarthy, owner	McCarthy Stone Quarry (133)	Wyandot	limestone	175,804	175,804	Wt-3	IM-298
David McCourt Mining Co. R.D. #1 Irondale, OH 43932 614-768-2260 David McCourt, owner	David McCourt Mining Co. (131)	Columbiana	clay			Ca-DM	IM-919
Bill McKeever Excavating 207 Bloomfield Ave. Urbana, OH 43078 513-652-1898 Bill McKeever, owner	Bill McKeever Excavating (536)	Champaign	sand & gravel	3,542	3,542	Cpn-24	IM-1167
Mecco, Inc. 2504 S. Main St. Middletown, OH 45042 513-422-3651 David T. Morgan, pres.	Mecco, Inc. (39)	Butler	sand & gravel	389,013	389,013	Br-15	IM-316
Mechanicsburg Sand & Gravel, Inc. P.O. Box 18 Mechanicsburg, OH 43044 513-834-2606 John D. Cushman, pres.	Mechanicsburg Sand & Gravel, Inc. (50)	Champaign	sand & gravel	243,283	219,858	Cpn-22	IM-889
Meigs County Commissioners Rte. 2 Rocksprings Rd. Pomeroy, OH 45769 614-992-2911 David H. Spencer, office mgr.	Meigs County Pit (211)	Meigs	sand & gravel	15,960	15,960	Ms-301	IM-619
Melvin Stone Co. 228 Melvin Rd. Wilmington, OH 45177 513-584-2486 Craig Beam, pres.	Melvin Stone Co. (17) Melvin Stone Co. (28) Melvin Stone Co. (92) Melvin Stone Co. (603) Melvin Stone Co. (481)	Clinton Fayette Pickaway Pickaway Pickaway	limestone limestone limestone sand & gravel sand & gravel	1,366,418 222,189 378,162 81,370 83,493	1,366,418 222,189 378,162 67,926 83,493	Cln-1 Fe-1 Pky-4 Pky-AAC Pky-R ⁵	IM-241 IM-831 IM-209 IM-1204 IM-993
Menuet Bros. Sand & Gravel, Inc. 5366 County Rd. 349 Rte. 1 Millersburg, OH 44654 216-674-4254 Gene Menuet, pres.	Fair Pit (153)	Holmes	sand & gravel	150,920	150,920	Hs-82	IM-707
Mesenburg Bros., Inc. R.D. 1 Collins, OH 44826 419-668-5691 Peter J. Mesenburg, pres.	Mesenburg Bros., Inc. (86) Mesenburg Bros., Inc. (20)	Erie Huron	sand & gravel sandstone	612 19,988	612 19,988	Ee-24 Hrn-8	IM-915 IM-268
Miami River Stone Co. 1556 Miami River Rd. Sidney, OH 45365 513-492-5412 Bradley Comer, pres.	Miami River Stone Co. (110) Miami River Stone Co. (311)	Shelby Shelby	limestone sand & gravel	311,355	311,355	Shy-6 Shy-17	IM-389 IM-389
Mickley Gravel Co. P.O. Box J Danville, OH 43014 614-599-7870 Paul A. Mickley, owner	Mickley Gravel Co. (162)	Knox	sand & gravel	1,500	215	Kx-5	IM-884
Miller Bros. Construction, Inc. Rte. 1 Box 30 Archbold, OH 43502 419-445-1015 Dale Miller, pres.	Miller Bros. Construction, Inc. (526)	Logan	sand & gravel	2,065	2,065	Lgn-M	IM-799

⁵This mine was operated 1st quarter 1994 by Richards Farms, Inc. and 2nd through 4th quarters 1994 by Melvin Stone Co.

1994 OHIO ALPHABETICAL DIRECTORY OF INDUSTRIAL-MINERAL MINE OPERATORS — Continued

Name, address, telephone number, and president/owner/manager of company	Name of mine (and map location number)	County	Commodity	1994 sales (tons)	1994 production (tons)	State mine number	Division of Reclamation permit number
Miller Bros. Gravel, Inc. 7900 S. Kessler-Frederick Rd. Tipp City, OH 45371 513-698-7204 Thomas O. Miller, pres.	Miller Bros. Gravel, Inc. (233)	Montgomery	sand & gravel	221,689	155,031	My-52	IM-348
H. M. Miller Construction Co. P.O. Box 131 Mogadore, OH 44260 216-628-4811 J. C. Smith, pres.	Krumroy Pit (330)	Summit	sand & gravel			St-46	IM-557
Miller Mining, Inc. P.O. Box 525 Sugarcreek, OH 44681 216-852-4511 Olen Miller, pres.	Miller Mining, Inc. (142)	Tuscarawas	clay			Ts-MMO	IM-1166
Miller Sand & Gravel, Inc. 10228 State Rte. 82 Windham, OH 44288 216-326-3157 Donald M. Miller, owner	Miller Sand & Gravel, Inc. (272)	Portage	sand & gravel	2,295	2,295	Pe-39	IM-174
Mitchell Transport, Inc. 35746 Lake Shore Blvd. Eastlake, OH 44094 216-942-9191 Robert Amos, pres.	North Park Reclamation Clay Center (92)	Lake	clay	3,328	3,328	Lke-M	IM-1059
Mohican Organic Products, Inc. Rte. 1, 47 Milligan Rd. Lucas, OH 44843 419-892-2212 Farley & Joyce Amos, owners	Mohican Pit (1)	Ashland	peat			Ald-13	
Moore's Excavating Co. 2222 N. State Rte. 68 Urbana, OH 43078 513-653-6288 Ralph Moore, owner	Moore's Excavating Co. (51) (153)	Champaign	sand & gravel clay	70,473	53,725	Cpn-20	IM-482
	Moore's Excavating Co. (620)	Clark	sand & gravel	1,068	1,068	Ck-29	IM-1233
Morrow Gravel Co. 11641 Mosteller Rd. Cincinnati, OH 45241 513-771-0820 James P. Jurgensen, pres.	Morrow Gravel Co. (63) Morrow Gravel Co. (501) Morrow Gravel Co. (502) Morrow Gravel Co. (503)	Mercer Warren Warren Warren	limestone sand & gravel sand & gravel sand & gravel	91,600 380,673	91,600 380,673	Mr-2 Wan-M Wan-M1 Wan-M2	IM-430 IM-728, IM-1065 IM-1051 IM-837
Morton International, Inc. Morton Salt Division P.O. Box 428 Grand River, OH 44045-0428 216-639-4243 Richard L. Wilson, plant mgr.	Fairport Mine (2)	Lake	salt	1,387,336	1,384,984	Lke-6	
Morton International, Inc. Morton Salt Division 151 S. Industrial St. P.O. Box 337 Rittman, OH 44270-0337 216-925-3015 Jay Stewart, pres.	Morton Salt Well Field (5)	Wayne	salt	469,475	488,890	We-9129	
Muskingum River Gravel Co. P.O. Box 1585 Zanesville, OH 43702-1585 614-453-0624 Larry E. Young, v. pres.	Muskingum River Gravel Co. (152) Muskingum River Gravel Co. (247) Muskingum River Gravel Co. (448) Muskingum River Gravel Co. (452) Plant #2 (367)	Hocking Muskingum Muskingum Ross Washington	sand & gravel sand & gravel sand & gravel sand & gravel sand & gravel	85,000 100,000 100,000 200,000 12,750	85,000 100,000 100,000 200,000 12,750	Hg-301 Mum-228 Mum-262 Rs-M Wn-38	IM-458 IM-421 IM-422 IM-114 IM-701
National Aggregates, Inc. P.O. Box 340 Malvern, OH 44644 216-863-1955 Bill Sheckler, pres.	National Aggregates, Inc. (512) National Aggregates, Inc. (610)	Carroll Stark	sand & gravel sand & gravel	264,362	264,362	Cl-N Sk-1017	IM-641 IM-1186

1994 OHIO ALPHABETICAL DIRECTORY OF INDUSTRIAL-MINERAL MINE OPERATORS – Continued

Name, address, telephone number, and president/owner/manager of company	Name of mine (and map location number)	County	Commodity	1994 sales (tons)	1994 production (tons)	State mine number	Division of Reclamation permit number
National Lime & Stone Co. P.O. Box 120 Findlay, OH 45839-0120 419-422-4341 R. W. Kruse, v. pres.	Lima Plant (5) Buckland Plant (11) Wapakoneta Plant (24) Bucyrus Plant (18) Delaware Plant (21) Findlay Plant (149) Marion Plant (60) Carey Plant (134) Upper Sandusky Plant (380) Upper Sandusky Plant (381)	Allen Auglaize Auglaize Crawford Delaware Hancock Marion Wyandot Wyandot Wyandot	limestone limestone sand & gravel limestone limestone limestone limestone limestone sand & gravel sand & gravel	1,351,131 460,142 247,751 1,605,368 2,323,943 1,099,176 705,140 3,035,099 206,031 6	1,473,355 415,103 130,361 1,678,922 2,223,130 984,379 566,154 3,027,861 210,574	An-3 Ae-10 Ae-30 Cd-1 Del-5 Hk-7 Mn-3 Wt-1 Wt-15 Wt-18	IM-484 IM-486 IM-598 IM-404 IM-207 IM-1002 IM-168 IM-405 IM-376 IM-551
Neer's Sand & Gravel 4859 Twp. Rd. 45 Bellefontaine, OH 43311 513-585-6733 Arden J. Neer, Sr., owner	Neer's Sand & Gravel (189)	Logan	sand & gravel	132,897	138,414	Lgn-6	IM-459
Nelson Sand & Gravel, Inc. P.O. Box 466 Kingsville, OH 44048 216-224-0198 Thomas H. Nelson, pres.	Nelson Sand & Gravel, Inc. (14) Nelson Sand & Gravel, Inc. (510)	Ashtabula Ashtabula	sand & gravel sand & gravel	15,000	15,000	Asa-12 Asa-N	IM-1130 IM-1109
Nelson Transfer, Inc. 7685 Fields-Ertel Rd. Cincinnati, OH 45247 513-489-0871 Mark Stark, pres.	Nelson Transfer, Inc. (520)	Hamilton	sand & gravel	23,277	23,277	Hmn-C	IM-1132
Newbury Sand & Gravel 15365 Ravenna Rd. Burton, OH 44021 216-834-8500 Blaine M. Kaufman, owner	Newbury Sand & Gravel (517) (50)	Geauga	sand & gravel sandstone	37,219 20,815	37,219 20,815	Gea-N	IM-1123
New Carlisle Sand & Gravel Co. 6090 S. Scarff Rd. New Carlisle, OH 45344 513-845-0696 Willard Lee Upton, owner	New Carlisle Sand & Gravel Co. (217)	Miami	sand & gravel	1,834	1,834	Mi-501	
Newton Asphalt Paving, Inc. P.O. Box 86 Strasburg, OH 44680 216-878-5648 G. A. Gessner & C. T. Newton, partners	516 (428)	Tuscarawas	sand & gravel	101,181	101,181	Ts-2001	IM-1004
Nick's Trucking 14228 Madison Rd. Middlefield, OH 44062 216-632-1949 Nick R. Loze, owner	Nick's Trucking (584)	Trumbull	sand & gravel	8,200	8,200	TI-16	IM-1158
Northern Ohio Materials, Inc. 8300 State Rte. 14 Streetsboro, OH 44241 216-626-5577 Roger Schuck, operations mgr.	Northern Ohio Materials, Inc. (273) State Route 416 Sand & Gravel (500)	Portage Tuscarawas	sand & gravel sand & gravel	299,360 32,602	299,360 32,602	Pe-85 Ts-2018 ⁷	IM-700 IM-1076
Northern Ohio Paving Co. 1750 Highland Rd. Twinsburg, OH 44087 216-425-7861 Walter H. Edwards, pres.	Northern Ohio Paving Co. (316)	Stark	sand & gravel	231,825	231,825	Sk-N	IM-156
North Shore Stone Quarries, Inc. 72 Fernhill Ave. Columbus, OH 43228 614-878-0620 Clifford Hammond, pres.	North Shore Stone Quarries, Inc. (109)	Seneca	limestone	5,823	5,823	Sa-8	IM-313
Northwood Stone & Asphalt Co. 1558 County Rd. 105 Belle Center, OH 43310 513-464-3833 Don E. Mill, pres.	Northwood Stone & Asphalt Co. (51) Rockhold Division (119)	Logan Union	limestone limestone	246,406 138,480	230,133 127,500	Lgn-2 Un-1	IM-494 IM-208

⁶Information for Wt-18 is reported under Wt-15.⁷This mine was operated 1st and 2nd quarters 1994 by Zink Petroleum Corp. dba State Route 416 Sand and Gravel and 3rd and 4th quarters 1994 by Northern Ohio Materials, Inc.

1994 OHIO ALPHABETICAL DIRECTORY OF INDUSTRIAL-MINERAL MINE OPERATORS — Continued

Name, address, telephone number, and president/owner/manager of company	Name of mine (and map location number)	County	Commodity	1994 sales (tons)	1994 production (tons)	State mine number	Division of Reclamation permit number
Nutter Bros. Coal Co., Inc. P.O. Box 248 New Straitsville, OH 43766 614-394-2681 James P. Nutter, pres.	Nutter Bros. Coal Co., Inc. (98)	Perry	clay	24,039	24,039	Py-N	IM-1097
NuWay Services, Inc. 3441 Sportsman Club Rd. Johnstown, OH 43031 614-587-2451 George McInturff, pres.	NuWay Services, Inc. (172)	Licking	clay	14,730	14,730	Lg-N	IM-1248
OHM Remediation Services Corp. 16406 U.S. Route 224 E Findlay, OH 45840 419-425-6047 Daniel P. Buettin, v. pres.	OHM Remediation Services Corp. (169)	Coshocton	clay			Cn-OHM	IM-1247
Carl E. Oeder & Sons Sand & Gravel 3890 Turtlecreek Rd. Lebanon, OH 45036 513-494-1238 Carl E. Oeder, pres.	Carl E. Oeder & Sons Sand & Gravel (352)	Warren	sand & gravel	457,673	457,673	Wan-41 ⁸	IM-629
Oglebay Norton Industrial Sands, Inc. 806 Market St. P.O. Box 4477 Zanesville, OH 43702-4477 614-452-2775 Mark Juszli, v. pres. & gen. mgr.	Millwood Sand Plant (24) Glass Rock (48) (137)	Knox Perry	sandstone sandstone clay	149,363 363,056	149,363 363,056	Kx-1 Py-344	IM-269 IM-1014
Ohio Asphaltic Limestone Corp. 8591 Mad River Rd. Hillsboro, OH 45133 513-364-2191 W. C. Mason, pres.	Ohio Asphaltic Limestone Corp. (42)	Highland	limestone	395,846	297,400	Hd-3	IM-253
Ohio Bulk Transfer Co. 3203 Harvard Rd. Newburgh Heights, OH 44105 216-883-7200 James Palladino, pres.	Ohio Bulk Transfer Co. (68)	Summit	sandstone			St-60	IM-1206
Olen Corp. 4755 S. High St. Columbus, OH 43207-4028 614-491-1515 Wayne Rayburn, pres.	Stewart Plant #4 (459) Hilliard Plant #1 (102) (154) Columbus Plant #3 (465) Fredericktown Plant #2 (161) Olen Corp. (555)	Athens Franklin Franklin Knox Knox	sand & gravel sand & gravel limestone sand & gravel sand & gravel sand & gravel	36,569 26,091 521,133 1,988,568 522,703	33,366 26,091 557,982 2,195,319 576,853	As-W Fn-43 Fn-58 Kx-16 Kx-OC	IM-979 IM-188 IM-1023 IM-793 IM-930
Oneida Sand & Gravel, Inc. 8000 Blade Rd. NW Malvern, OH 44644 216-343-6831 Louis H. Smitley, pres.	Oneida Sand & Gravel, Inc. (47)	Carroll	sand & gravel	75,796	71,563	Cl-204	IM-554
Osborne Materials Co. P.O. Box 248 Grand River, OH 44045-0248 216-357-5562 Harold T. Larned, pres.	Osborne Materials Co. (2)	Lake Erie	sand & gravel (dredged)	132,237	132,237	Lke-D	
Oster Sand & Gravel, Inc. 5947 Whippel Ave. NW North Canton, OH 44720-7692 216-494-5472 Marlene K. Oster, pres.	Massillon Plant (326) Oster Sand & Gravel, Inc. (586)	Stark Tuscarawas	sand & gravel sand & gravel	485,783 147,800	485,783 147,800	Sk-165 Ts-2036	IM-192, IM-781 IM-1155
Ours Sand & Gravel 20444 State Rte. 7 South Crown City, OH 45623 614-256-1378 Donald & Gloria Ours, owners	Ours Sand & Gravel (466)	Gallia	sand & gravel	5,710	5,710	Ga-O	IM-1028
R. H. Penick Co. 1504 Blue Jay Rd. Heath, OH 43056 614-323-3040 R. H. Penick, owner	R. H. Penick Co. (3)	Licking	salt	16,172	16,172	Lg-45	

⁸See also Dravo Basic Materials Co., Inc.

1994 OHIO ALPHABETICAL DIRECTORY OF INDUSTRIAL-MINERAL MINE OPERATORS – Continued

Name, address, telephone number, and president/owner/manager of company	Name of mine (and map location number)	County	Commodity	1994 sales (tons)	1994 production (tons)	State mine number	Division of Reclamation permit number
Penn Eagle Coal Corp. P.O. Box 151 Wellsburg, WV 26070 304-737-0696 Alan K. Worthley, pres.	B & S Mine (554) (59) (133)	Jefferson	sand & gravel sandstone clay	46	46	Jfn-PE	IM-1162
Penry Stone Co. P.O. Box 176 Radnor, OH 43066 614-595-3373 Walter Penry, owner	Radnor Plant (23) Penry Stone Co. (198)	Delaware Marion	limestone sand & gravel	310,441 48,890	310,441 48,890	Del-2 Mn-4	IM-299 IM-290
Phillips Sand & Gravel U.S. Rte. 35 Box 187 Alpha, OH 45301 513-426-5461 George E. Phillips, pres.	Phillips Sand & Gravel (115)	Greene	sand & gravel	576,299	576,299	Ge-36	IM-305
Piketon Sand & Gravel 4281 Roush Rd. Hillsboro, OH 45133 513-393-4211 John B. Patton, pres.	Cutlip (255)	Pike	sand & gravel	417,778	448,314	Pke-24	IM-222
Piqua Materials, Inc. Piqua Minerals Division 1750 W. Statler Rd. Piqua, OH 45356 513-773-4824 Albert R. Donovan, mgr.	Piqua Minerals Division (64)	Miami	limestone	461,644	436,554	Mi-1	IM-382
Pleasant Valley Limestone 12321 Ideal Rd. Byesville, OH 43723 614-685-6726 George V. Thompson, pres.	Pleasant Valley Limestone (185)	Muskingum	limestone	30,024	30,024	Mum-907	IM-1200
C. F. Poeppelman, Inc. 4755 N. State Rte. 721 Bradford, OH 45308 513-448-2191 James Poeppelman, pres.	C. F. Poeppelman, Inc. (67)	Miami	limestone	288,162	288,162	Mi-10	IM-335
Portage Lakes Sand & Gravel Co. 2800 N. Turkeyfoot Rd. Akron, OH 44319 216-644-2285 Douglas K. Rennick, pres.	Portage Lakes Sand & Gravel Co. (384)	Summit	sand & gravel	182,027	182,027	St-53	IM-874
Powell Gravel & Topsoil, Inc. P.O. Box 214 Harrison, OH 45030 513-353-1400 Ron Powell, pres.	Powell Gravel & Topsoil, Inc. (134)	Hamilton	sand & gravel	288,426	288,426	Hmn-71 ⁹	IM-771
Prairie Lane Sand & Gravel Co. 4401 Prairie Lane Rd. Wooster, OH 44691 216-262-6821 Ralph W. Miller, Jr., pres.	Prairie Lane Sand & Gravel Co. (372) (179)	Wayne	sand & gravel shale	147,272 3,849	147,272 3,849	We-11	IM-547
Precision Aggregate, Inc. 12205 E. Gypsy Lane Rd. Bowling Green, OH 43402 419-352-4681 Randy G. Schmeltz, pres.	Precision Aggregate II (183) Precision Aggregate I (379)	Wood Wyandot	limestone sand & gravel	89,181 38,305	105,552 59,305	Wd-14 Wt-4	IM-1157 IM-520
Premier Services Corp. 901 E. Eighth Ave. King of Prussia, PA 19406 215-337-1100 P.E. Kinsey, pres.	Premier Services Corp. (106)	Seneca	limestone	186,194	186,194	Sa-2	IM-352
Puskarich Limestone, Inc. P.O. Box 207 Sherrodsville, OH 44675 614-269-3481 Nick Puskarich, pres.	Harlem Springs (15)	Carroll	limestone			Cl-183	IM-7

⁹This mine was operated 1st quarter 1994 by Southern Ohio Sand & Gravel, Inc. and 2nd through 4th quarters 1994 by Powell Gravel and Topsoil, Inc.

1994 OHIO ALPHABETICAL DIRECTORY OF INDUSTRIAL-MINERAL MINE OPERATORS – Continued

Name, address, telephone number, and president/owner/manager of company	Name of mine (and map location number)	County	Commodity	1994 sales (tons)	1994 production (tons)	State mine number	Division of Reclamation permit number
Putnam Stone Co. R.R. 1, 7053 Road M Ottawa, OH 45875-9754 419-523-6004 Tony Shroyer, pres.	Putnam Stone Co. (98)	Putnam	limestone	252,063	272,882	Pm-2	IM-570
Quality Ready Mix, Inc. R.R. 5 Wapakoneta, OH 45895 419-738-2817 Robert E. Hirschfeld, pres.	Quality Pit (25)	Auglaize	sand & gravel	75,244	75,244	Ae-16	IM-595
Quality Stone Co. 8751 N. State Rte. 7 Cheshire, OH 45620 614-992-6637 Jay Hall, Jr., pres.	Quality Stone Co. (148) Route 32 (182)	Vinton Vinton	limestone limestone	585,131	585,131	Vn-190 Vn-193	D-0761
Quarry Trails 7500 S. Cassel Rd. P.O. Box 520 Vandalia, OH 45377 513-667-4431 John E. Moyer, Jr., co-owner	Quarry Trails (178)	Montgomery	limestone	265	265	My-Q	IM-860
R & S, Inc. 7522 Wales Rd. NW North Canton, OH 44720 216-499-1024 Gary R. Ross, pres.	Copley Sand & Gravel (427)	Summit	sand & gravel	6,075	6,075	St-54	IM-934
Rack Sand, Inc. 5175 Este Ave. Cincinnati, OH 45232 513-242-5052 Roy Schweitzer, owner	Rack Sand, Inc. (139)	Hamilton	sand & gravel	2,200	2,200	Hmn-10	IM-226
Rainbow Sand & Gravel, Inc. 9500 Elliman Rd. Mantua, OH 44255 216-562-4701 Bernard Udelson & Jeremy Samson, owners	Rainbow Sand & Gravel, Inc. (280)	Portage	sand & gravel	64,980	64,980	Pe-64	IM-1017
John P. Raisch, Inc. P.O. Box 93 Miamisburg, OH 45342 513-866-3094 John P. Raisch, owner	John P. Raisch, Inc. (562)	Montgomery	sand & gravel	7,750	7,750	My-R	IM-539
Rash Energy, Inc. 3114 U.S. Route 62 Dundee, OH 44624 216-359-5909 Freeman Mullet, pres.	Rash Energy, Inc. (64) (144) (144)	Wayne	sandstone clay shale	47,407 53,333 37,925	47,407 53,333 37,925	We-26	IM-690, IM-1210
Red Brush Peat Co. 6945 Red Brush Rd. Ravenna, OH 44326 216-297-0923 Barbara H. Linger, owner	Red Brush Peat Co. (482) (116) (9)	Portage	sand & gravel clay peat	1,310 7,724 3,112	1,310 7,724 3,112	Pe-61	IM-1064
Red Hill Farm 71963 Lodge Rd. Freeport, OH 43973 614-489-5435 Thomas A. Mizer, mgr.	Red Hill Farm (189)	Guernsey	limestone			Gy-326	IM-1244
Redland Ohio, Inc. 128 E. Main St. Woodville, OH 43469 419-849-2321 Ian McGregor, pres.	Millersville Plant (103) Woodville Plant (104)	Sandusky Sandusky	limestone limestone	¹⁰ 1,625,735	1,613,487	Sy-4 Sy-3	IM-381 IM-282
Richards & Son, Inc. 49947 State Rte. 338 Racine, OH 45771 614-247-2311 Dennis R. Taylor, v. pres.	Richards & Son, Inc. (212)	Meigs	sand & gravel	576,789	576,789	Ms-298	IM-32

¹⁰Information for Sy-4 is reported under Sy-3.

1994 OHIO ALPHABETICAL DIRECTORY OF INDUSTRIAL-MINERAL MINE OPERATORS – Continued

Name, address, telephone number, and president/owner/manager of company	Name of mine (and map location number)	County	Commodity	1994 sales (tons)	1994 production (tons)	State mine number	Division of Reclamation permit number
Richards Farms, Inc. 24537 Canal Rd. Circleville, OH 43113 614-474-3602 Bruce S. Richards, pres.	Richards Farms, Inc. (481) Stevenson Site (604)	Pickaway Pickaway	sand & gravel sand & gravel	5,628	5,628	Pky-R ¹¹ Pky-R1	IM-993 IM-992
Richards Service Garage 2170 Wilberforce-Clifton Rd. Xenia, OH 45385 513-372-8263 Roger Richards, owner	Richards Service Garage (547)	Greene	sand & gravel			Ge-R	IM-829
Richland Moulded Brick Co. 1000 Richland Shale Rd. P.O. Box 1711 Mansfield, OH 44901 419-524-0000 Dudley P. Frame, Jr., pres.	Richland Moulded Brick Co. (114)	Richland	shale	10,000	10,000	Rd-R	IM-1035
Ridge Township Quarry 16905 Middlepoint Rd. Van Wert, OH 45891 419-238-2533 Jenny Lautenschleger, foreman	Ridge Township Quarry (122)	Van Wert	limestone	52,084	52,084	Vt-7	IM-642
Ries Sand & Gravel 169 State Rte. 95 Jeromesville, OH 44840 419-368-7833 Robert Ries, owner	Ries Sand & Gravel (6)	Ashland	sand & gravel	1,065	1,065	Ald-9	IM-745
Riverside Sand & Gravel Co., Inc. P.O. Box 324 Tallmadge, OH 44278-0324 216-673-2021 A. H. Acken, Jr., pres.	Riverside (333) (49)	Summit	sand & gravel sandstone	30,758 2,503	30,758 2,503	St-24	IM-239
Gary Roberts Excavating 570 Derby Downs Rd. Newark, OH 43055 614-763-3206 Gary L. Roberts, owner	Gary Roberts Excavating (419)	Licking	sand & gravel	1,342	1,342	Lg-504	IM-991
Rogers Group, Inc. dba Norwalk Sand & Gravel P.O. Box 338 Sandusky, OH 44871-0338 419-625-8493 Frank Warren, CEO	Norwalk Sand & Gravel (157)	Huron	sand & gravel	266,423	266,423	Hrn-1	IM-550
Rogers Group, Inc. dba Sandusky Crushed Stone Co. P.O. Box 338 Sandusky, OH 44871-0338 419-625-8493 Frank Warren, CEO	Parkertown Quarry (25)	Erie	limestone	3,317,483	3,317,483	Ee-11	IM-263
Jim Romig Excavating 8084 Dawn Rd. Sherrodsville, OH 44675 614-269-1225 James Romig, owner	William E. Miller property (153)	Coshocton	limestone	3,805	3,805	Cn-A	IM-1011
Ross County Gravel Co. P.O. Box 158 Sabina, OH 45169-0158 513-584-2486 Craig Beam, pres.	Ross County Gravel Co. (530)	Ross	sand & gravel	223,251	223,251	Rs-R	IM-1143
Ross County Redi-Mix Co., Inc. 689 Marietta Rd. Chillicothe, OH 45601 614-775-4466 Todd Wrightsel, v. pres.	Ross County Redi-Mix Co., Inc. (574)	Ross	sand & gravel			Rs-RC	IM-925
Rubber City Sand & Gravel Co. P.O. Box 106 Uniontown, OH 44685 216-699-3311 William H. Leach, Sr., owner	Rubber City Sand & Gravel Co. (334)	Summit	sand & gravel	135,449	135,449	St-9	IM-167

¹¹This mine was operated 1st quarter 1994 by Richards Farms, Inc. and 2nd through 4th quarters 1994 by Melvin Stone Co.

1994 OHIO ALPHABETICAL DIRECTORY OF INDUSTRIAL-MINERAL MINE OPERATORS — Continued

Name, address, telephone number, and president/owner/manager of company	Name of mine (and map location number)	County	Commodity	1994 sales (tons)	1994 production (tons)	State mine number	Division of Reclamation permit number
Rubel Quarry, Inc. 35479 State Rte. 78 Lewisville, OH 43754 614-567-3217 Randy Rubel, pres.	Rubel Quarry, Inc. (164)	Monroe	limestone	15,500	15,500	Me-509	IM-1094
Rupp Construction, Inc. 18228 Fulton Rd. Marshallville, OH 44645 216-855-2781 J. P. Radabaugh, pres.	Rupp Construction, Inc. (581) Rupp Construction, Inc. (373)	Stark Wayne	sand & gravel sand & gravel	77,917 34,530	77,917 34,530	Sk-R We-7	IM-697 IM-471
S & S Aggregate, Inc. P.O. Box 1585 Zanesville, OH 43702-1585 614-453-0624 Larry E. Young, v. pres.	Plant #1 (101) Twin Lakes Sand, Inc. (281) Twin Lakes Sand, Inc. (282) Twin Lakes Sand, Inc. (336)	Franklin Portage Portage Summit	sand & gravel sand & gravel sand & gravel sand & gravel	61,000 125,000 50,000 105,000	61,000 125,000 50,000 105,000	Fn-24 Pe-59 Pe-67 St-44	IM-266 IM-210 IM-202 IM-178
G. M. Sader Excavating & Paving, Inc. P.O. Box 306 Bowling Green, OH 43402 419-352-5113 Gregory M. Sader, pres.	G. M. Sader Excavating & Paving, Inc. (456) (104)	Wood	sand & gravel clay	1,037	228	Wd-13	IM-998
Salt Creek Materials, Inc. 880 Spry Rd. Zanesville, OH 43701 614-872-3860 Charles O. Lighthizer, owner	Salt Creek Materials, Inc. (248) Salt Creek Materials, Inc. (144)	Muskingum Muskingum	sand & gravel limestone	384 16,259	0 16,259	Mum-216 Mum-269	IM-689 IM-1009
Samco, Inc. 10217 State Rte. 534 N Middlefield, OH 44062 216-272-5158 J. Jim Holmes, pres.	Springbrook (340)	Ashtabula, Trumbull	sand & gravel	431,018	431,018	TI-12 ¹²	IM-131
Sandkuhl Clay Works, Inc. 05536 Kossuth-Amanda Rd. Spencerville, OH 45887 419-647-4131 Leslie E. Sandkuhl, pres.	Sandkuhl Clay Works, Inc. (2)	Auglaize	clay	5,336	5,336	Ae-7	
Sandman Sand & Stone, Inc. 8840 Geiser Rd. Holland, OH 43528 419-875-6380 Robert Parker, pres.	County Road 1 (542) Archbold-Whitehouse Pit (556)	Fulton Lucas	sand & gravel sand & gravel	172,298 3,145	172,298 3,145	Ftn-S Ls-MH	IM-1146 IM-1144
Sands Hill Coal Co., Inc. 1203 N. Pennsylvania Ave. Wellston, OH 45692 614-384-5659 Bonny A. Huffman, pres.	Sands Hill Strip #4 (158)	Jackson	limestone	340,014	340,014	Jkn-SH	IM-1068
Sant Sand & Gravel, Inc. P.O. Box 750 Mt. Vernon, OH 43050 614-397-0000 Keith L. Sant, pres.	Sant Sand & Gravel, Inc. (163)	Knox	sand & gravel	168,333	178,052	Kx-3	IM-300
Michael B. Sayers P.O. Box 515 Put-in-Bay, OH 43456-0515 419-285-2260 Michael B. Sayers, owner	Michael B. Sayers (516)	Delaware	sand & gravel			Del-S	IM-1118
Guy Schieve P.O. Box 83 Birmingham, OH 44816 216-965-8792 Guy Schieve, owner	Guy Schieve (191)	Lorain	sand & gravel	14,915	14,915	Ln-12	IM-731
Schilling Contractors, Inc. Rte. 2 Box 326 Ironton, OH 45638 614-532-8463 Earl P. Schilling, pres.	Schilling Contractors, Inc. (305)	Scioto	sand & gravel			So-78	
Schloss Materials Co. 13700 McCracken Rd. Cleveland, OH 44125 216-587-4900 Raymond E. Schloss, Sr., pres.	Schloss Materials Co. (274) Schloss Materials Co. (569)	Portage Portage	sand & gravel sand & gravel	63,894	63,384	Pe-60 Pe-SP	IM-78 IM-499

¹²All sales and production are from Trumbull County.

1994 OHIO ALPHABETICAL DIRECTORY OF INDUSTRIAL-MINERAL MINE OPERATORS – Continued

Name, address, telephone number, and president/owner/manager of company	Name of mine (and map location number)	County	Commodity	1994 sales (tons)	1994 production (tons)	State mine number	Division of Reclamation permit number
Schrader Sand & Gravel 601 Gravel Washer Rd. Beaver, OH 45613 614-226-1325 Melvin Schrader, owner	Schrader Sand & Gravel (45)	Pike	sandstone	27,768	28,891	Pke-31 ¹³	IM-835
Scioto Sand & Gravel P.O. Box 31 Marion, OH 43301-0031 614-494-2177 Gerald E. Fleming, pres.	Scioto Sand & Gravel (197)	Marion	sand & gravel	1,062	0	Mn-16	IM-171
Scioto Valley Resources P.O. Box 760 Lucasville, OH 45648 513-393-4211 John B. Patton, pres.	Scioto Valley Resources Division (395)	Scioto	sand & gravel	255,169	225,649	So-100	IM-950
Seaway Sand & Stone, Inc. 2190 Whitehouse-Spencer Rd. Swanton, OH 43558 419-865-5751 Mack S. Moon, pres.	Seaway Sand & Stone, Inc. (188) (195) (156)	Lucas	limestone sand & gravel clay	118,895 145,432 8,072	118,895 145,432 8,072	LS-13	IM-492
Seville Sand & Gravel, Inc. 8215 Seville Rd. Seville, OH 44273 216-948-1812 George Cross, pres.	Seville Sand & Gravel, Inc. (206)	Medina	sand & gravel	373,728	373,728	Ma-22	IM-425, IM-650, IM-651
Shamrock Materials, Inc. 11641 Mosteller Rd. Cincinnati, OH 45241 513-771-0820 James P. Jurgensen, pres.	Shamrock Materials, Inc. (38)	Butler	sand & gravel	605,706	605,706	Br-52	IM-814
Sharon Stone Co. P.O. Box 100 Dexter City, OH 45727 614-783-3575 John P. McCort, pres.	Sharon Stone Co. (167)	Noble	limestone	111,580	111,580	Ne-S	IM-913
R. W. Sidley, Inc. 615 W. Main St. Conneaut, OH 44030 216-298-3232 Robert C. Sidley, pres.	Conneaut Pit (15)	Ashtabula	sand & gravel	71,100	71,100	Asa-15	IM-783
R. W. Sidley, Inc. 7123 Madison Rd. Thompson, OH 44086 216-298-3232 Robert C. Sidley, pres.	Thompson Pit (18) Hambden Quarry (58) Painesville Pit (166)	Geauga Geauga Lake	sandstone sandstone sand & gravel	159,000 400 30,400	215,000 400 30,400	Gea-1 Gea-S Lke-7	IM-163 IM-161 IM-162
Sidney Sand & Gravel Co. P.O. Box 379 Sidney, OH 45365 513-492-3125 Thomas P. Milligan, pres.	Milligan & Milligan-Washington Twp. Pit (312) Rock Run Quarry (111) Wagner (493) Staley Pit (577)	Shelby Shelby Shelby Shelby	sand & gravel limestone sand & gravel sand & gravel	172,220 58,333 455 41,301	172,220 58,333 455 41,301	Shy-13 Shy-16 Shy-S Shy-SS	IM-412 IM-411 IM-1005 IM-438
Sidwell Bros., Inc. 4620 Limestone Valley Rd. Zanesville, OH 43701 614-849-2392 Dale R. Sidwell, pres.	Stonehill Quarry (146) Sidwell Quarry (78) Sidwell Bros., Inc. (186) Hard Rocks (40)	Coshocton Muskingum Muskingum Trumbull	limestone limestone limestone sandstone	37,427 574,095 75,695	37,427 574,095 75,695	Cn-830 Mum-104 Mum-SB Tl-13	IM-1102 IM-277 IM-1212 IM-777
Silchuk Gravel Co. 2470 Wall Rd. Rittman, OH 44270 216-336-8796 Junior F. Silchuk, owner	Silchuk Gravel Co. (208)	Medina	sand & gravel			Ma-16	
Simak Trucking, Inc. 3052 E. Center St. P.O. Box 599 North Kingsville, OH 44068 216-224-1009 Joseph E. Simak, pres.	Simak Trucking, Inc. (413) (166)	Ashtabula	sand & gravel clay	46,673 453	46,673 453	Asa-18	IM-949

¹³This mine was operated January through October 1994 by Schrader Sand & Gravel, and November through December 1994 by Best Sand Corp.

1994 OHIO ALPHABETICAL DIRECTORY OF INDUSTRIAL-MINERAL MINE OPERATORS – Continued

Name, address, telephone number, and president/owner/manager of company	Name of mine (and map location number)	County	Commodity	1994 sales (tons)	1994 production (tons)	State mine number	Division of Reclamation permit number
Slankard Dozer Service, Inc. Rte. 1 Box 49 Strasburg, OH 44680 216-878-5883 Jerry L. Slankard, pres.	Beach City Pit (54)	Tuscarawas	sandstone	1,136	1,136	Ts-2032	IM-1141
Small's Sand & Gravel, Inc. P.O. Box 617 Gambier, OH 43022 614-427-4096 Michael Small, pres.	Killduff Rd. (165) Zion Rd. (408)	Knox Knox	sand & gravel sand & gravel	243,119 300	243,119 300	Kx-15 Kx-17	IM-967 IM-968
Sober Sand & Gravel Co. 2898 Tallmadge Rd. Ravenna, OH 44266 216-325-7013 Waldo A. Sober, agent	Sober Sand & Gravel Co. (275)	Portage	sand & gravel	1,000	600	Pe-18	IM-193
Soehnen Bros. Sand & Gravel, Inc. 10449 Soehnen Rd. NW Beach City, OH 44608 216-756-2244 Francis L. Soehnen, pres.	Soehnen Bros. Sand & Gravel, Inc. (343)	Tuscarawas	sand & gravel	77,003	76,971	Ts-1826	IM-88
Solomon's Mines, Inc. 7732 Salem-Unity Rd. Salem, OH 44460 216-332-0123 Jack Solomon, owner	Solomon's Mines, Inc. (196) (135)	Mahoning	sand & gravel clay	69,974 5,276	69,974 5,276	Mg-632	IM-808
Solon Excavators Sand & Gravel, Inc. 10925 Mantua Center Rd. P.O. Box Q Mantua, OH 44255 216-274-8241 Howard Sargent, pres.	Trethewey (443) Solon Excavators Sand & Gravel, Inc. (623) Solon Excavators Sand & Gravel, Inc. (276) Solon Excavators Sand & Gravel, Inc. (486)	Geauga Geauga Portage Portage	sand & gravel sand & gravel sand & gravel sand & gravel	21,851 500 267,908	0 500 267,908	Gea-40 Gea-43 Pe-36 Pe-SE	IM-977 IM-1230 IM-90 IM-1096
Soltis Sand & Gravel 19102 Nelson Ledge Rd. Garrettsville, OH 44231 216-548-5813 James W. Soltis, owner	Soltis Sand & Gravel (415) (86)	Geauga	sand & gravel clay	71 562	71 562	Gea-9	IM-132
Southern Ohio Aggregates, Inc. 11641 Mosteller Rd. Cincinnati, OH 43113 513-771-0820 James P. Jurgensen, pres.	Southern Ohio Aggregates, Inc. (460) Southern Ohio Aggregates, Inc. (551) Southern Ohio Aggregates, Inc. (552) Southern Ohio Aggregates, Inc. (284)	Butler Hamilton Hamilton Preble	sand & gravel sand & gravel sand & gravel sand & gravel	2,500 800 1,500 3,000	2,500 800 1,500 3,000	Br-S Hmn-S Hmn-SO Pre-7	IM-1053 IM-746 IM-720 IM-306
Southern Ohio Sand & Gravel, Inc. 9336 Dick Rd. Harrison, OH 45030 513-353-9014 David Welsh, pres.	Southern Ohio Sand & Gravel, Inc. (134)	Hamilton	sand & gravel	29,392	29,392	Hmn-71 ¹⁴	IM-771
Southern Silica, Inc. P.O. Box 22 Richmond Dale, OH 45673 614-884-4721 George W. Cannon, Jr., pres.	Southern Silica, Inc. (34)	Ross	sandstone	62,375	62,375	Rs-16	IM-172
Southwestern Portland Cement Co. Eastern Division 506 E. Xenia Rd. P.O. Box 191 Fairborn, OH 45324 513-878-8651 Clarence Comer, pres.	Southwestern Portland Cement Co. (33) Southwestern Portland Cement Co. (10) Southwestern Portland Cement Co. (34) Harner (90) Southwestern Portland Cement Co. (72)	Clark, Greene Greene Greene Greene Montgomery	limestone clay limestone clay limestone	 287,948	 287,948	Ge-1 Ge-8 Ge-9 Ge-44 My-58	IM-393 IM-364 IM-364 IM-330
Speer Brothers, Inc. 3812 Old Railroad Rd. Sandusky, OH 44870 419-626-5291 David Speer, pres.	101 Location (89)	Erie	clay	81,200	81,200	Ee-32	IM-1077
Sphagnum Moss Peat Farm 9904 State Route 736 Plain City, OH 43064 513-597-7251 Mike Poling, owner	Sphagnum Moss Peat Farm (2)	Champaign	peat	1,197	3,475	Cpn-9	

¹⁴This mine was operated 1st quarter 1994 by Southern Ohio Sand & Gravel, Inc. and 2nd through 4th quarters 1994 by Powell Gravel and Topsoil, Inc.

1994 OHIO ALPHABETICAL DIRECTORY OF INDUSTRIAL-MINERAL MINE OPERATORS — Continued

Name, address, telephone number, and president/owner/manager of company	Name of mine (and map location number)	County	Commodity	1994 sales (tons)	1994 production (tons)	State mine number	Division of Reclamation permit number
Spring Creek Corp. 4723 Hardin-Wapak Rd. Sidney, OH 45365 513-492-4186 Nelson E. Barhorst, pres.	Pence Deposit (314) River Quarry (112) Jones Deposit (315) "H" Mine (494)	Shelby Shelby Shelby Shelby	sand & gravel limestone sand & gravel sand & gravel	43,175 244,999 279,289 10,000	43,175 244,999 279,289 10,000	Shy-11 Shy-15 Shy-18 Shy-SC	IM-743 IM-387 IM-388 IM-1018
Spring Industries, Inc. P.O. Box 507 New Philadelphia, OH 44663 216-339-3585 Glenn Straub, pres.	Bolivar Pit (582) Midvale Pit (344) Hardy Salt (588)	Stark Tuscarawas Tuscarawas	sand & gravel sand & gravel sand & gravel	165,713 4,000	277,800 4,000	Sk-SI Ts-1771 Ts-SI	IM-588 IM-77 IM-569
Spring Valley Investments, Inc. 2800 N. Turkeyfoot Rd. Akron, OH 44319 216-644-2285 Douglas K. Rennick, pres.	Spring Valley Investments, Inc. (335)	Summit	sand & gravel			St-26	IM-803
City of Springfield 201 Eagle City Rd. Springfield, OH 45502 513-390-7210 Robert Chaffin, Jr., water plant supt.	City of Springfield (437)	Clark	sand & gravel			Ck-7	IM-449
Springfield Sand & Gravel Co. 4301 S. Charleston Pike Springfield, OH 45502 513-325-7386 Lester Hamm, supt.	Springfield Sand & Gravel Co. (58)	Clark	sand & gravel	518,127	518,127	Ck-25	IM-358
Standard Lafarge 6715 Tippecanoe Rd. Bldg. C Canfield, OH 44406 216-533-3338 Jeffrey A. Lewis, sr. v. pres.	Marblehead (84) Shalersville (277) Shalersville Portable (278) Mantua (487) Navarre (453)	Ottawa Portage Portage Portage Stark	limestone sand & gravel sand & gravel sand & gravel sand & gravel	3,431,955 821,132 4,110	3,720,455 799,141 4,110	Oa-7 Pe-68 Pe-SS1 Pe-SS2 Sk-241	IM-440 IM-687, IM-1107 IM-660, IM-1124 IM-1047 IM-582
State Line Resources, Inc. Route 154 Negley, OH 44441 216-426-2728 Charles H. Muse, Jr., pres.	State Line Resources, Inc. (4) (4)	Columbiana	clay shale	41,680	41,680	Ca-505	IM-13, IM-936
Stewart & Reichman, Inc. 1866 State Rte. 416 SE Gnadenhutzen, OH 44629 614-922-5898 Timothy G. Brown, pres.	Stewart & Reichman, Inc. (346)	Tuscarawas	sand & gravel	60,716	60,716	Ts-111	IM-55
Stillwater Sand & Gravel, Inc. 7850 Karns Rd. West Milton, OH 45383 513-698-3028 Ed Bohse, pres.	Stillwater Sand & Gravel, Inc. (447)	Miami	sand & gravel	201,443	201,328	Mi-504	IM-1032
Stocker Sand & Gravel Co. P.O. Box 176 Gnadenhutzen, OH 44629 614-254-4635 William E. Stocker, pres.	Stocker Sand & Gravel Co. (347) Stocker Sand & Gravel Co. (348)	Tuscarawas Tuscarawas	sand & gravel sand & gravel	385,690 558,554	385,690 558,554	Ts-69 Ts-125	IM-51 IM-50
Stoneco, Inc. 1345 Ford St. P.O. Box 29A Maumee, OH 43537 419-893-8731 John Bearss, pres.	Maumee Quarry (54) Celina Quarry (62) Rocky Ridge (83) Auglaize Quarry (88) Scott Quarry (121) South Montpelier (375) North Montpelier (376) Takacs Quarry (506) Lime City Quarry (131) Portage Quarry (132)	Lucas Mercer Ottawa Paulding Van Wert Williams Williams Williams Wood Wood	limestone limestone limestone limestone limestone sand & gravel sand & gravel sand & gravel limestone limestone	90,176 469,121 148,876 730,252 264,809 286,162 286,162 764,779 261,735	90,176 469,121 148,876 730,252 264,809 286,162 286,162 764,779 261,735	Ls-2 Mr-1 Oa-14 Pg-2 Vt-3 Ws-6 Ws-9 Ws-T Wd-6 Wd-11	IM-503 IM-592 IM-320 IM-481 IM-495 IM-497 IM-498 IM-1022 IM-480 IM-475
Stone Creek Brick Co. P.O. Box 116 Stone Creek, OH 43840 216-339-5511 A. C. Marsh, Jr., pres.	Stone Creek Clay Mine (67) Stone Creek Shale Pit (67)	Tuscarawas Tuscarawas	clay shale	36,666 6,648	36,666 6,648	Ts-1557 Ts-1558	IM-52 IM-52

1994 OHIO ALPHABETICAL DIRECTORY OF INDUSTRIAL-MINERAL MINE OPERATORS – Continued

Name, address, telephone number, and president/owner/manager of company	Name of mine (and map location number)	County	Commodity	1994 sales (tons)	1994 production (tons)	State mine number	Division of Reclamation permit number
Stonehill Quarry, Inc. 36036 State Route 541 Warsaw, OH 43844 614-849-2392 Dale R. Sidwell, pres.	Stonehill Quarry, Inc. (594)	Coshocton	sand & gravel			Cn-SQ	IM-1185
Suever Stone Co., Inc. Bloomlock Rd. P.O. Box 10 Delphos, OH 45833 419-692-0931 Neal Lause, pres.	Suever Stone Co., Inc. (7) Delphos Quarry (123)	Allen Van Wert	limestone limestone	117,850 178,459	117,850 216,217	An-4 Vt-1	IM-491 IM-500
Sugarcreek Clay & Limestone, Inc. P.O. Box 402 Sugarcreek, OH 44681 216-852-4440 Daniel O. Miller, pres.	Newcomerstown Plant (72)	Coshocton	sand & gravel			Cn-624	IM-243
Summitville Tiles, Inc. P.O. Box 173 Summitville, OH 43962 216-223-1511 David Johnson, pres.	Summitville Tiles, Inc. (5) Summitville Tiles, Inc. (127)	Columbiana Columbiana	shale shale	39,550	39,550	Ca-205 Ca-989	IM-74 IM-1110
Sunrise Sand & Gravel 4872 Meade Hollow Rd. Orwell, OH 44076 216-474-0614 Kenneth, Robert, & Richard McElroy, partners	Sunrise Sand & Gravel (617)	Ashtabula	sand & gravel			Asa-21	IM-1239
Sunshine Sand Co. 8861 State Rte. 43 Kent, OH 44240 216-587-2700 Margaret A. Bova, pres.	Sunshine Sand Co. (528)	Portage	sand & gravel	2,315	2,315	Pe-SSC	IM-318
Swingle Drilling, Inc. 713 Keystone St. Crooksville, OH 43731 614-982-8420 James R. Swingle, pres.	T. G. Industries, Inc. (138)	Perry	clay			Py-S1	IM-1183
T. K. Stone Co., Inc. 2050 E. Kingscreek Rd. Urbana, OH 43078 513-653-8201 Jerry Trout, pres.	T. K. Stone Co., Inc. (619)	Champaign	sand & gravel	4,316	5,787	Cpn-25	IM-1227
T. T. & K. Construction, Inc. 32 State Route 239 Portsmouth, OH 45663 614-858-6661 Patricia Picklesimer, pres.	T. T. & K. Construction, Inc. (630)	Scioto	sand & gravel			So-TTK	IM-1250
Tackett Builders 906 Charleston Pike Chillicothe, OH 45601 614-772-5431 Carmel G. Tackett, owner	Tackett Builders (606) (150)	Ross	sand & gravel shale	546	546	Rs-T	IM-1189
Teague Gravel Co., Inc. 10924 Kinsman Rd. Newbury, OH 44065 216-564-5671 Donald Teague, pres.	Teague Gravel Pit (109)	Geauga	sand & gravel	100,084	94,910	Gea-35	IM-321
Thiel Construction Co. P.O. Box 225 Blakeslee, OH 43505 419-272-2712 Marvin Thiel, pres.	Thiel Construction Co. (633)	Williams	sand & gravel	8,575	5,503	Ws-21	IM-1225
Don Thompson Excavating, Inc. 1471 W. Paintersville Rd. Spring Valley, OH 45370 513-862-7911 Todd Thompson, pres.	Don Thompson Excavating, Inc. (546)	Greene	sand & gravel			Ge-46	IM-1149

1994 OHIO ALPHABETICAL DIRECTORY OF INDUSTRIAL-MINERAL MINE OPERATORS — Continued

Name, address, telephone number, and president/owner/manager of company	Name of mine (and map location number)	County	Commodity	1994 sales (tons)	1994 production (tons)	State mine number	Division of Reclamation permit number
Tipp Stone Co., Inc. P.O. Box 367 Troy, OH 45373 513-228-8423 T. L. Eidemiller, pres.	Troy (446) Meeker (238)	Miami Montgomery	sand & gravel sand & gravel	1,905 58,647	1,905 58,647	Mi-12 My-61	IM-467 IM-468
Towne Square Products 156 E. Broadway Westerville, OH 43081 614-882-6990 Suzanne Edgar, pres.	Towne Square Products (41)	Noble	shale	275	280	Ne-66	IM-664
Tri-County Limestone Co. 4664 Hardin-Marion Rd. N Kenton, OH 43326 419-675-7127 Norman Cochran, pres.	Tri-County Limestone Co. (61)	Marion	limestone	170,385	170,385	Mn-1	IM-250
Tri-State Asphalt Products 44 Sixteenth St. Wheeling, WV 26003 304-233-1110 Glenn Straub, pres.	Tri-State Asphalt Products (26)	Belmont	sand & gravel	221,724	258,515	Bt-74	IM-288
Tri-State Clay & Coal Co., Inc. P.O. Box 135 Hitchins, KY 41146-0135 606-474-5525 Tom Parsons, pres.	Tri-State Clay & Coal Co., Inc. (134)	Lawrence	clay			Le-T	IM-1172
Trout Sand & Gravel Co. Rte. 4 Marietta, OH 45750 800-344-4948 Henry C. Trout, Jr., owner	Trout Sand & Gravel Co. (369)	Washington	sand & gravel	44,125	44,125	Wn-510	IM-25
Tuffco Sand & Gravel, Inc. P.O. Box 399 Marysville, OH 43040 614-873-3977 Charles Lewis, pres.	Tuffco Sand & Gravel, Inc. (474)	Madison	sand & gravel	104,177	113,851	Mdn-11	IM-1063
U.S. Silica Co. 701 Boyce Memorial Dr. Ottawa, IL 61350 815-434-0188 Richard E. Goodell, pres.	Coxey Works (42)	Tuscarawas	sandstone	6,626	6,626	Ts-1660	IM-68
Union Aggregates Co. 8328 Watkins Rd. P.O. Box 178 Ostrander, OH 43061 614-666-2013 Don E. Mill, pres.	Boundary Rd. (200) Union Limestone Plant (120)	Marion Union	sand & gravel limestone	34,889 784,641	31,530 784,641	Mn-10 Un-2	IM-196 IM-236
United Builders Distributing Corp. 24371 State Rte. 30 E. Rochester, OH 44625 216-894-2394 Roger McDaniel, pres.	United Builders Distributing Corp. (464)	Columbiana	sand & gravel			Ca-U	IM-999
V.I.P. Contractors, Inc. 475 Morman Rd. Hamilton, OH 45013 513-863-7272 James E. Broshear, pres.	V.I.P. Contractors, Inc. (28)	Butler	sand & gravel			Br-36	IM-649
Valley Clay Mining Co. 26 N. Shawnee Ave. Zanesville, OH 43701 614-452-3633 F. Klemm Ungemach III, pres.	Kimpel #2 (122) Tague Mine (173)	Muskingum Perry	clay clay	17,627 358	27,545 358	Mum-904 Py-V	IM-1127 IM-1245
Valley Gravel 11840 Darby Creek Rd. Orient, OH 43146 614-877-4730 Dorothy H. Combs, owner	Valley Gravel (627)	Pickaway	sand & gravel	1,494	1,139	Pky-C	IM-1223

1994 OHIO ALPHABETICAL DIRECTORY OF INDUSTRIAL-MINERAL MINE OPERATORS — Continued

Name, address, telephone number, and president/owner/manager of company	Name of mine (and map location number)	County	Commodity	1994 sales (tons)	1994 production (tons)	State mine number	Division of Reclamation permit number
Valley Gravel Co. 4974 Shreve Rd. Wooster, OH 44691 216-264-1745 Ira & Grace Eikleberry, partners	Valley Gravel Co. (632)	Wayne	sand & gravel			We-27	IM-1242
Valley Materials Co. 4947 U.S. Rte. 23 South P.O. Box 400 Piketon, OH 45661 614-289-4400 Ralph McFann, pres.	Valley Materials Co. (252) (99)	Pike	sand & gravel clay	76,093 6,339	76,093 6,339	Pke-26	IM-142
Van Wey Sand & Gravel, Inc. 6824 Mt. Vernon Rd. NE Newark, OH 43055 614-745-5965 Richard L. Van Wey, pres.	Van Wey Sand & Gravel, Inc. (179)	Licking	sand & gravel	681,091	706,300	Lg-10	IM-217
Ralph C. Wagner & Sons 7317 Brinker St. Navarre, OH 44662 216-879-2516 Ralph C. Wagner, owner	Ralph C. Wagner & Sons (579)	Stark	sand & gravel	160	100	Sk-W	IM-867
Wagner Quarries Co. 4203 Milan Rd. Sandusky, OH 44870 419-625-8141 Stephen C. Lochner, pres.	Wagner Quarries Co. (26)	Erie	limestone	1,618,892	1,722,442	Ee-1	IM-310
Wallace Rd. Sand & Gravel P.O. Box 74 Petersburg, OH 44454 216-542-3696 David Sugar, pres.	Wallace Rd. Sand & Gravel (475)	Mahoning	sand & gravel			Mg-630	IM-1091
Waller Bros. Stone Co. P.O. Box 157 McDermott, OH 45652 614-259-2356 F. L. Waller, pres.	Inskeep Quarry (36) Crabtree Quarry (37) Miller Quarry (38)	Scioto Scioto Scioto	sandstone sandstone sandstone	2,682 3,218	2,682 3,218	So-48 So-76 So-82	IM-140 IM-141 IM-158
Tommie G. Walters 1676 County Rd. D Swanton, OH 43558 419-825-3192 Tommie G. Walters, pres.	Tommie G. Walters (543)	Fulton	sand & gravel	1,660	1,660	Ftn-6	IM-1175
Walter's Gravel 11302 National Rd. SE Thornville, OH 43076 614-323-0783 Viva W. Fenice, owner	Walter's Gravel (180)	Licking	sand & gravel			Lg-15	
Ward Materials, Inc. 385 Oak St. R.R. 2 Leipsic, OH 45856 419-943-2450 Arnold W. Rosebrock, pres.	Ward Materials, Inc. (2)	Allen	sand & gravel	45,197	60,727	An-15	IM-721
Don Wartko Construction, Inc. 975 Tallmadge Rd. Kent, OH 44240 216-673-5252 Donald Wartko, pres.	Don Wartko Construction, Inc. (483)	Portage	sand & gravel			Pe-92	IM-522
Waste Management of Ohio, Inc. 3619 Gracemont St. SE East Sparta, OH 44626 216-874-3855 Greg A. Terwilliger, site mgr.	Countywide RDF (126) (126)	Stark	clay shale	182,832 1,650,279	182,832 1,650,279	Sk-217	IM-750
Waterloo Coal Co., Inc. P.O. Box 626 Jackson, OH 45640 614-682-7787 Phil A. Bowman, v. pres.	Waterloo-Zoar Quarry (47) (23)	Jackson	limestone clay	407,846 1,411	407,846 1,411	Jkn-367	IM-774

1994 OHIO ALPHABETICAL DIRECTORY OF INDUSTRIAL-MINERAL MINE OPERATORS – Continued

Name, address, telephone number, and president/owner/manager of company	Name of mine (and map location number)	County	Commodity	1994 sales (tons)	1994 production (tons)	State mine number	Division of Reclamation permit number
Watson Gravel, Inc. 2728 Hamilton-Cleves Rd. P.O. Box 277 Ross, OH 45061 513-863-0070 Ronald E. Watson, pres.	Watson Pit (44) Spring Valley (441) Harrison Pit (142) Mason Pit (363)	Butler Greene Hamilton Warren	sand & gravel sand & gravel sand & gravel sand & gravel	792,436 668,428 782,554 300	792,436 668,428 782,554 300	Br-47 Ge-38 Hmn-60 Wan-10	IM-111 IM-333 IM-761 IM-465
Weber Sand & Gravel, Inc. Rte. 2 Box 3 Bryan, OH 43506 419-636-7920 Thomas G. Weber, pres.	Weber Sand & Gravel, Inc. (377)	Defiance, Williams	sand & gravel	174,782	174,782	Ws-11 ¹⁵	IM-509, IM-661
Hoyle Weddle 2419 U.S. Route 68 N Yellow Springs, OH 45387 513-374-1234 Hoyle Weddle, owner	Hoyle Weddle (549)	Greene	sand & gravel	5,000	5,000	Ge-W	IM-645
Weidle Sand & Gravel, Inc. P.O. Box 247 Germantown, OH 45327 513-855-2228 Ronald L. Weidle, Sr., pres.	Weidle Sand & Gravel, Inc. (41) Weidle Sand & Gravel, Inc. (239) Weidle Sand & Gravel, Inc. (158)	Butler Montgomery Montgomery	sand & gravel sand & gravel clay	185,084 304,441 63,054	185,084 304,441 63,054	Br-6 My-41 My-W	IM-177 IM-360 IM-1207
Welch Sand & Gravel, Inc. 10217 Columbia St. Harrison, OH 45030-9751 513-353-3220 Charles H. Welch, pres.	Schlichter Pit (45) Fernald Pit (143) East Miami Pit (144)	Butler Hamilton Hamilton	sand & gravel sand & gravel sand & gravel	44,527 400,991 324,859	44,527 400,991 324,859	Br-38 Hmn-42 Hmn-48	IM-218 IM-823 IM-220
Brush Wellman, Inc. 14710 W. Portage River South Rd. Elmore, OH 43416-9502 419-862-4372 John Cayton, engineer	Brush Wellman Clay Mine (136)	Ottawa	clay	90,000	90,000	Oa-19	IM-1153
White Rock Quarry, L.P. Division of U.S. Aggregates, Inc. P.O. Box 119 Clay Center, OH 43408-0119 419-855-8388 Robert Simpson, pres.	White Rock Quarry (82)	Ottawa	limestone	907,600	793,354	Oa-6	IM-296
Frank Widmor Coal Co., Inc. P.O. Box 176 Blaine, OH 43909 614-635-4811 Frank Widmor, owner	Bellaire Stone (152) (56) (105) (105)	Belmont	limestone sandstone clay shale	266,025 7,404 197 67,785	266,025 7,404 197 67,785	Bt-1190	IM-1089
Mark Williams Blacktop Co., Inc. Rte. 4 Box 34 Marietta, OH 45750 614-373-2457 Mark Williams, owner	Williams Pit #2 (504) Williams Pit #1 (534)	Washington Washington	sand & gravel sand & gravel	19,074	45,253	Wn-1007 Wn-1009	IM-1042 IM-525
Willowbrook 39130 Brookfield St. Lisbon, OH 44432 216-424-7493 Ray Perrino, owner	Willowbrook (538)	Columbiana	sand & gravel	5,231	5,231	Ca-993	IM-1180
Gene T. Wilson P.O. Box 46 Mt. Sterling, OH 43143 614-877-4743 Eugene Wilson, owner	Gene T. Wilson (565)	Pickaway	sand & gravel	1,700	1,700	Pky-W	IM-1176
Winfield Clay 3068 Stone Creek Rd. SW Stone Creek, OH 43840 216-339-5452 David A. Miller, owner	Winfield Clay (190) (175)	Tuscarawas	limestone clay	91 1,100	91 1,100	Ts-2047	IM-1224
Dennis Winzeler Center St. Rte. 4 Box 4 Bryan, OH 43506 419-636-4285 Dennis & Polly Winzeler, owners	Dennis Winzeler (378)	Williams	sand & gravel			Ws-14	IM-614

¹⁵All sales and production are from Williams County.

1994 OHIO ALPHABETICAL DIRECTORY OF INDUSTRIAL-MINERAL MINE OPERATORS — Continued

Name, address, telephone number, and president/owner/manager of company	Name of mine (and map location number)	County	Commodity	1994 sales (tons)	1994 production (tons)	State mine number	Division of Reclamation permit number
Wise Gravel 8535 W. Klinger Rd. Covington, OH 45318 513-473-3246 John A. Wise, owner	Wise Gravel (221)	Miami	sand & gravel	607	607	Mi-9	IM-408
Wyandot Dolomite, Inc. P.O. Box 126 Carey, OH 43316-0126 419-396-7641 David J. Wolfe, pres.	Wyandot Dolomite, Inc. (135)	Wyandot	limestone	1,433,834	1,649,326	Wt-8	IM-273
Wysong Gravel Co. P.O. Box 5 West Alexandria, OH 45381 513-962-2559 Gerald E. Wysong, pres.	Camden Plant (285) West Alexandria Plant (286)	Preble Preble	sand & gravel sand & gravel	245,167 115,430	245,167 115,430	Pre-4 Pre-6	IM-477 IM-478
Wysong Stone Co. 5897 State Rte. 503 N P.O. Box 159 Lewisburg, OH 45338 513-962-2559 Gerald E. Wysong, pres.	Wysong Stone Co. (95)	Preble	limestone	93,645	93,645	Pre-5	IM-447
X L Sand & Gravel P.O. Box 157 Negley, OH 44441 216-426-9876 Robert Lansberry, pres.	X L Sand & Gravel (68)	Columbiana	sand & gravel	57,300	57,300	Ca-881	IM-611
Xenia Sand, Gravel, & Asphalt Co. 588 Dayton-Xenia Rd. Xenia, OH 45385 513-372-2978 David A. Thompson, owner	Xenia Sand, Gravel, & Asphalt Co. (117)	Greene	sand & gravel	1,758	916	Ge-10	IM-518
Young's Sand & Gravel Co. 689 State Rte. 39 W P.O. Box 117 Loudonville, OH 44842 419-994-3040 Milton Young, pres.	Sprang (8) Young's Sand & Gravel Co. (412) Young's Sand & Gravel Co. (616)	Ashland Ashland Ashland	sand & gravel sand & gravel sand & gravel	91,850 205,716 55,962	91,850 205,716 55,962	Ald-7 Ald-15 Ald-Y	IM-392 IM-944 IM-1216
Zerger's Quarry 100 N. Sycamore St. Woodsfield, OH 43793 614-472-1675 Herman Zerger, owner	Zerger's Quarry (80)	Noble	limestone	6,100	6,100	Ne-86	IM-70
Zink Petroleum Corp. dba State Rte. 416 Sand & Gravel 1530 Corporate Woods Pky. Suite 200 Uniontown, OH 44685 216-492-2854 Jeffrey E. Zink, pres.	State Rte. 416 Sand & Gravel (500)	Tuscarawas	sand & gravel	258,742	258,742	Ts-2018 ¹⁶	IM-1076
Zoar Mining Co. P.O. Box 550 Zoar, OH 44697 216-874-2434 David W. Johnson, pres.	Zoar Mining Co. (71) (71)	Tuscarawas	clay shale	3,092	3,092	Ts-540	IM-28
Zollinger Sand & Gravel Co. 11899 Easton Rd. Rittman, OH 44270 216-855-2464 Carl Zollinger, pres.	Zollinger Sand & Gravel Co. (374)	Wayne	sand & gravel	83,908	83,908	We-15	IM-398

¹⁶This mine was operated 1st and 2nd quarters 1994 by Zink Petroleum Corp. dba State Route 416 Sand and Gravel and 3rd and 4th quarters 1994 by Northern Ohio Materials, Inc.

1994 LIMESTONE/DOLOMITE COMPANIES WITH SALES OR PRODUCTION

Company	No. of operations	Sales (tons)	Production (tons)	Company	No. of operations	Sales (tons)	Production (tons)
American Aggregates Corp.	13	8,727,928	7,796,479	Ohio Asphaltic Limestone Corp.	1	395,846	297,400
Ayers Limestone Quarry, Inc.	1	73,747	73,747	Olen Corp.	1	521,133	557,982
Barrett Paving Materials, Inc.	3	590,092	611,917	Penry Stone Co.	1	310,441	310,441
Belden Brick Co.	1	3,320	3,320	Piqua Materials, Inc.	1	461,644	436,554
Belville Mining Co., Inc.	1	87,625	28,607	Pleasant Valley Limestone	1	30,024	30,024
Black Gold Recovery, Inc.	1	15,836	15,836	C. F. Poeppelman, Inc.	1	288,162	288,162
Bluffton Stone Co.	1	356,275	356,275	Precision Aggregate, Inc.	1	89,181	105,552
Blum Mining Co.	1	64,013	64,013	Premier Services Corp.	1	186,194	186,194
Central Ohio Coal Co.	2	142,255	142,255	Putnam Stone Co.	1	252,063	272,882
Chesterhill Stone Co.	1	884,048	838,410	Quality Stone Co.	1	585,131	585,131
Christman Quarry	1	79,695	79,695	Quarry Trails	1	265	265
Con-Ag, Inc.	1	207,740	216,327	Redland Ohio, Inc.	2	1,625,735	1,631,487
Davon, Inc.	2	2,752,675	2,681,797	Ridge Township Quarry	1	52,084	52,084
Dravo Basic Materials Co., Inc.	1	388,590	736,782	Rogers Group, Inc.,			
C. E. Duff & Son, Inc.	2	305,080	305,080	dba Sandusky Crushed Stone Co.	1	3,317,483	3,317,483
E.M.A.I. Corp.	2	2,114,236	2,114,236	Jim Romig Excavating	1	3,805	3,805
East Fairfield Coal Co.	1	8,966	8,966	Rubel Quarry, Inc.	1	15,500	15,500
R. A. Eberts Co., Inc.	1	239,376	239,376	Salt Creek Materials, Inc.	1	16,259	16,259
Erie Blacktop, Inc.	1	77,297	218,472	Sands Hill Coal Co., Inc.	1	340,014	340,014
Fox Stone Products, Inc.	1	8,000	8,000	Seaway Sand & Stone, Inc.	1	118,895	118,895
The France Stone Co.	6	3,783,876	4,375,763	Sharon Stone Co.	1	111,580	111,580
GenLime Group, L.P.	1	703,477	313,261	Sidney Sand & Gravel Co.	1	58,333	58,333
Gotttron Bros. Co.	1	114,040	68,607	Sidwell Bros., Inc.	3	687,217	687,217
Gregory Stone Co., Inc.	1	391,359	391,359	Southwestern Portland Cement Co.	1	287,948	287,948
J. M. Hamilton & Sons Co., Inc.	1	130,481	130,481	Spring Creek Corp.	1	244,999	244,999
Hardin Quarry Co., Inc.	1	168,600	168,600	Standard Lafarge	1	3,431,955	3,720,455
Holmes Limestone Co.	1	136,163	136,163	Stoneco, Inc.	7	2,729,748	2,729,748
Honey Creek Stone Co.	1	119,463	117,660	Suever Stone Co., Inc.	2	296,309	334,067
K.C.C.I.	1	400	400	Tri-County Limestone Co.	1	170,385	170,385
Kellstone, Inc.	1	580,692	580,692	Union Aggregates Co.	1	784,641	784,641
Kimble Clay & Limestone Co.	1	63,886	63,886	Wagner Quarries Co.	1	1,618,892	1,722,442
King Limestone, Inc.	1	255,745	255,745	Waterloo Coal Co., Inc.	1	407,846	407,846
Lafarge Corp.	1	658,607	658,607	White Rock Quarry, L.P.	1	907,600	793,354
Latham Limestone, Inc.	1	335,931	337,900	Frank Widmor Coal Co., Inc.	1	266,025	266,025
MacRitchie Materials, Inc.	1	177,201	177,201	Winfield Clay	1	91	91
Marshall Quarry, Inc.	1	9,041	9,041	Wyandot Dolomite, Inc.	1	1,433,834	1,649,326
Martin Marietta Magnesia				Wysong Stone Co.	1	93,645	93,645
Specialties, Inc.	1	2,316,570	1,918,339	Zerger's Quarry	1	6,100	6,100
Maxville Quarries, Inc.	2	433,870	259,844				
McCarthy Stone Quarry	1	175,804	175,804	TOTAL: 82 companies	125	63,169,439	62,415,343
Melvin Stone Co.	3	1,966,769	1,966,769				
Miami River Stone Co.	1	311,355	311,355				
Morrow Gravel Co.	1	91,600	91,600				
National Lime & Stone Co.	7	10,579,999	10,368,904				
North Shore Stone Quarries, Inc.	1	5,823	5,823				
Northwood Stone & Asphalt Co.	2	384,886	357,633				

1994 OHIO DIRECTORY OF LIMESTONE/DOLOMITE MINE OPERATORS REPORTING SALES OR PRODUCTION, BY COUNTY

For those mines for which the Division of Mines has not assigned a state mine number, a letter designation is used (example: Cn-A).

LIMESTONE/DOLOMITE OPERATORS DIRECTORY

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County	Name of operator	Name of mine or quarry	Township	Geological unit	Type and principal use	State mine number
Adams	Davon, Inc.	Plum Run Stone Division	Meigs	Peebles, Greenfield, & Tymochtee Dolomites (Silurian)	crushed stone — unspecified	Ads-1
Allen	Bluffton Stone Co.	Bluffton Stone Co.	Richland	Tymochtee Dolomite (Silurian)	unspecified	An-1
	National Lime & Stone Co.	Lima Plant	Bath	Silurian	crushed stone — riprap, commercial building, railroad ballast	An-3
	Suever Stone Co., Inc.	Suever Stone Co., Inc.	Spencer	Tymochtee Dolomite (Silurian)	crushed stone — asphaltic concrete, road construction/resurfacing, commercial building; aglime	An-4
Athens Auglaize	R. A. Eberts Co., Inc.	Diamond Stone	Lee		crushed stone — road construction/resurfacing	As-533
	Con-Ag, Inc.	Con-Ag, Inc.	Noble	Cedarville Dolomite (Silurian)	crushed stone — riprap, asphaltic concrete, road construction/resurfacing; aglime	Ae-31
	National Lime & Stone Co.	Buckland Plant	Moulton	Silurian	crushed stone — riprap, commercial building; aglime	Ae-10
Belmont	Ayers Limestone Quarry, Inc.	Ayers Limestone Quarry, Inc.	Pease	Permian	crushed stone — riprap, road construction/resurfacing	Bt-716
	Black Gold Recovery, Inc.	Black Gold Recovery Limestone	Richland	Fishpot limestone (Pennsylvanian)	crushed stone — road construction/resurfacing	Bt-1192
	Frank Widmor Coal Co., Inc.	Bellaire Stone	Pulney		crushed stone — riprap	Bt-1190
Clark	American Aggregates Corp.	Springfield #423	Springfield	Cedarville Dolomite (Silurian)	crushed stone — road construction/resurfacing	Ck-1
Clinton	Melvin Stone Co.	Melvin Stone Co.	Richland	Guelph Dolomite (Silurian)	crushed stone — riprap, portland cement concrete, asphaltic concrete, road construction/resurfacing, commercial building, residential/farm use; aglime	Cln-1
Coshooton	Jim Romig Excavating	William E. Miller property	White Eyes		crushed stone — riprap	Cn-A
	Sidwell Bros., Inc. (dba Stonehill Quarry, Inc.)	Stonehill Quarry	Bedford, Perry	Putnam Hill limestone (Pennsylvanian)	crushed stone — road construction/resurfacing	Cn-830
	National Lime & Stone Co.	Bucyrus Plant	Holmes	Devonian	crushed stone — riprap, flux stone, commercial building, railroad ballast, extenders, fillers; aglime	Cd-1
Darke Delaware	American Aggregates Corp.	Fort Jefferson #424	Butler	Cedarville Dolomite (Silurian)	crushed stone — road construction/resurfacing	Dke-1
	American Aggregates Corp.	Shawnee # 225	Concord	Columbus & Delaware Limestones (Devonian)	crushed stone — road construction/resurfacing	Del-4
	National Lime & Stone Co.	Delaware Stone #227	Scioto	Columbus Limestone (Devonian)	crushed stone — road construction/resurfacing	Del-3
Erie	Penry Stone Co.	Delaware Plant	Scioto	Columbus & Delaware Limestones (Devonian)	crushed stone — riprap, commercial building, railroad ballast; aglime	Del-5
	Erie Blacktop, Inc.	Radnor Plant	Radnor	Columbus & Delaware Limestones (Devonian)	crushed stone — portland cement concrete, commercial building	Del-2
	Kellstone, Inc.	Erie Blacktop Quarry	Margaretta		crushed stone — riprap, portland cement concrete, asphaltic concrete, road construction/resurfacing, aglime	Ee-27
	Rogers Group, Inc. (dba Sandusky Crushed Stone Co.)	Kellstone, Inc.	Kelleys Island	Columbus Limestone (Devonian)	unspecified	Ee-K
		Parkertown Quarry	Groton	Columbus & Delaware Limestones (Devonian)	crushed stone — riprap, portland cement concrete, asphaltic concrete, road construction/resurfacing, commercial building, railroad ballast, landscape use, fill; aglime; block, public works	Ee-11

1994 OHIO DIRECTORY OF LIMESTONE/DOLOMITE MINE OPERATORS REPORTING SALES OR PRODUCTION, BY COUNTY — Continued

County	Name of operator	Name of mine or quarry	Township	Geological unit	Type and principal use	State mine number
Erie (cont.)	Wagner Quarries Co.	Wagner Quarries Co.	Perkins	upper Columbus & Delaware Limestones (Devonian)	crushed stone — road construction/resurfacing	Ee-1
Fayette	American Aggregates Corp. Melvin Stone Co.	Blue Rock Limestone #427 Melvin Stone Co.	Perry Green	Tymochtee Dolomite (Silurian) Tymochtee Dolomite (Silurian)	crushed stone — road construction/resurfacing crushed stone — riprap, road construction/resurfacing, commercial building, railroad ballast, residential/farm use; aglime	Fe-2 Fe-1
Franklin	American Aggregates Corp.	Columbus Limestone #221	Franklin, Jackson, Marion	Columbus Limestone (Devonian)	crushed stone — road construction/resurfacing	Fn-53
		Marble Cliff #224	Norwich	Columbus & Delaware Limestones (Devonian)	crushed stone — road construction/resurfacing	Fn-2
	Olen Corp.	Hilliard Plant #1	Brown	Salina dolomite (Silurian)	crushed stone — riprap, road construction/resurfacing, commercial building	Fn-43
Greene	American Aggregates Corp.	Cedarville Limestone #425	Cedarville	Cedarville Dolomite (Silurian)	crushed stone — road construction/resurfacing	Ge-17
Guernsey	King Limestone, Inc.	Fairborn Limestone #431	Sugar Creek	Cedarville Dolomite (Silurian)	crushed stone — road construction/resurfacing	Ge-25
Hancock	National Lime & Stone Co.	King Limestone, Inc. Findlay Plant	Spencer Liberty	Fishpot limestone (Pennsylvanian) Niagaran dolomite (Silurian)	crushed stone — road construction/resurfacing crushed stone — riprap, commercial building, railroad ballast, aglime	Gy-309 ¹ Hk-7
Hardin	C.E. Duff & Son, Inc. Hardin Quarry Co., Inc.	Forest Quarry Hardin Quarry Co., Inc.	Jackson Pleasant	Niagaran dolomite (Silurian) Tymochtee Dolomite (Silurian)	crushed stone — road construction/resurfacing crushed stone — riprap, portland cement concrete, road construction/resurfacing, commercial building, other; aglime	Hdn-S Hdn-2
Highland	Davon, Inc.	Highland Stone Division	Hamer	Brassfield & Dayton Limestones (Silurian)	crushed stone — unspecified	Hd-2
	Dravo Basic Materials Co., Inc. Marshall Quarry, Inc.	Lynchburg Plant Marshall Quarry, Inc.	Union Marshall		crushed stone — road construction/resurfacing crushed stone — road construction/resurfacing; unspecified	Hd-D Hd-4
Holmes	Ohio Asphaltic Limestone Corp.	Ohio Asphaltic Limestone Corp.	Union		crushed stone — riprap, asphaltic concrete, road construction/resurfacing, aglime	Hd-3
Jackson	Holmes Limestone Co. Sands Hill Coal Co., Inc.	241 Plant Sands Hill Strip #4	Hardy Milton	Putnam Hill limestone (Pennsylvanian) Vanport limestone (Pennsylvanian)	crushed stone — road construction/resurfacing crushed stone — road construction/resurfacing; aglime	Hs-67 Jkn-SH
	Waterloo Coal Co., Inc.	Waterloo-Zoar Quarry	Bloomfield, Madison		crushed stone — road construction/resurfacing	Jkn-367
Jefferson	K.C.C.I. Belville Mining Co., Inc.	Apex Belville Mining Co. #1	Springfield Washington		crushed stone — unspecified crushed stone — commercial building, unspecified	Jfn-K Le-B
Lawrence	American Aggregates Corp. C. E. Duff & Son, Inc.	East Liberty #226 C. E. Duff & Son, Inc.	Perry Richland		crushed stone — road construction/resurfacing crushed stone — riprap, portland cement concrete, road construction/resurfacing, commercial building	Lgn-1 Lgn-15
Logan	Northwood Stone & Asphalt Co.	Northwood Stone & Asphalt Co.	Richland	Tymochtee Dolomite (Silurian)	crushed stone — riprap, asphaltic concrete, road construction/resurfacing, aglime	Lgn-2
Lucas	Barrett Paving Materials, Inc. The France Stone Co.	Sylvania Quarry Sylvania	Sylvania Sylvania		crushed stone — unspecified crushed stone — road construction/resurfacing	LS-12 LS-3

Mahoning	Seaway Sand & Stone, Inc.	Waterville Seaway Sand & Stone, Inc.	Waterville	Tymochtee Dolomite (Silurian)	crushed stone — road construction/resurfacing	Ls-1
	Stoneco, Inc.	Maumee Quarry	Swanton		crushed stone — riprap, road construction/resurfacing	Ls-13
	Blum Mining Co.		Waynesfield		crushed stone — riprap, portland cement concrete, asphaltic concrete, road construction/resurfacing, commercial building, other; aglime	Ls-2
	East Fairfield Coal Co.		Springfield	Vanport limestone (Pennsylvanian)	crushed stone — road construction/resurfacing	Mg-629
Marion	E.M.A.I. Corp. (dba ESSROC Materials, Inc.)	Bessemer Pit	Springfield		crushed stone — other	Mg-631
	Honey Creek Stone Co.	Carbon Pit	Poland	Vanport limestone (Pennsylvanian)	crushed stone — unspecified	Mg-608
	J. M. Hamilton & Sons Co., Inc.	Honey Creek Stone Co.	Poland		crushed stone — unspecified	Mg-EM
	National Lime & Stone Co.	Marion Plant	Springfield	Vanport limestone (Pennsylvanian)	crushed stone — unspecified	Mg-54
Mercer	Tri-County Limestone Co.	Tri-County Limestone Co.	Marion		crushed stone — portland cement concrete, asphaltic concrete, road construction/resurfacing	Mn-2
	Morrow Gravel Co.	Morrow Gravel Co.	Grand Prairie, Marion	Columbus & Delaware Limestones (Devonian)	crushed stone — riprap, commercial building, railroad ballast; aglime	Mn-3
	Stoneco, Inc.	Celina Quarry	Grand	Niagara dolomite (Silurian)	crushed stone — riprap, portland cement concrete, road construction/resurfacing, dog/horse runs; aglime	Mn-1
	Barrett Paving Materials, Inc.	Gregory Quarry	Dublin	Lockport & Guelph Dolomites (Silurian)	crushed stone — unspecified	Mr-2
Miami	Gregory Stone Co., Inc.	Barrett Paving Materials, Inc.	Jefferson	Niagara dolomite (Silurian)	crushed stone — riprap, portland cement concrete, asphaltic concrete, road construction/resurfacing, commercial building, railroad ballast; other; aglime	Mr-1
	Piqua Materials, Inc.	Gregory Quarry	Union	Brassfield Limestone (Silurian)	crushed stone — road construction/resurfacing	Mi-502
	C. F. Poeppelman, Inc.	C. F. Poeppelman, Inc.	Union	Brassfield Limestone, Dayton & Laurel Dolomites (Silurian)	crushed stone — road construction/resurfacing	Mi-BPM
	Christman Quarry	Christman Quarry	Springcreek		unspecified	Mi-16
Monroe	Rubel Quarry, Inc.	Rubel Quarry, Inc.	Union		crushed stone — riprap, flux stone, road construction/resurfacing, industrial fillers; aglime	Mi-1
	American Aggregates Corp.	Phillipsburg Limestone #421	Newberry	Cedarville Dolomite (Silurian)	crushed stone — riprap, portland cement concrete, asphaltic concrete, road construction/resurfacing; aglime	Mi-10
	Quarry Trails	Huber Heights Limestone #432	Seneca		crushed stone — unspecified	Me-C
	Southwestern Portland Cement Co.	Quarry Trails	Seneca		crushed stone — unspecified	Me-509
Montgomery	Central Ohio Coal Co.	Dayton Limestone #420	Clay	Cedarville Dolomite (Silurian)	crushed stone — road construction/resurfacing	My-1
	Chesterhill Stone Co.	Huber Heights Limestone #432	Madison	Cedarville Dolomite (Silurian)	crushed stone — road construction/resurfacing	My-23
		Quarry Trails	Van Buren	Cedarville Dolomite (Silurian)	crushed stone — road construction/resurfacing	My-32
		Southwestern Portland Cement Co.	Madison		unspecified	My-Q
Morgan		Quarry Trails	Wayne	Brassfield Limestone (Silurian)	stone for portland cement manufacture	My-58
		Southwestern Portland Cement Co.	Manchester	Benwood limestone (Pennsylvanian)	crushed stone — road construction/resurfacing	Mon-600
		Central Ohio Coal Co.	Newton	Maxville Limestone (Mississippian)	crushed stone — riprap, portland cement concrete, asphaltic concrete, road construction/resurfacing, commercial building, railroad ballast; other; stone for portland cement manufacture; aglime	Mum-106
		Chesterhill Stone Co.				

¹See also Muskingum County.

1994 OHIO DIRECTORY OF LIMESTONE/DOLOMITE MINE OPERATORS REPORTING SALES OR PRODUCTION, BY COUNTY — Continued

County	Name of operator	Name of mine or quarry	Township	Geological unit	Type and principal use	State mine number
Muskingum (cont.)	King Limestone, Inc.	King Limestone, Inc.	Rich Hill	Fishpot limestone (Pennsylvanian)	crushed stone — road construction/resurfacing	Gy-3092
	Pleasant Valley Limestone	Pleasant Valley Limestone	Hopewell	Maxville Limestone (Mississippian)	crushed stone — unspecified	Mum-907
	Salt Creek Materials, Inc.	Salt Creek Materials, Inc.	Perry		crushed stone — road construction/resurfacing	Mum-269
	Sidwell Bros., Inc.	Sidwell Quarry	Newton	Maxville Limestone (Mississippian)	crushed stone — asphaltic concrete, road construction/resurfacing	Mum-104
Noble	Central Ohio Coal Co. Sharon Stone Co. Zerger's Quarry	Sidwell Bros., Inc.	Newton		crushed stone — road construction/resurfacing	Mum-SB
		Windy Hill	Brookfield	Benwood limestone (Pennsylvanian)	crushed stone — road construction/resurfacing	Ne-C
		Sharon Stone Co.	Noble	Fishpot limestone (Pennsylvanian)	crushed stone — road construction/resurfacing	Ne-S
		Zerger's Quarry	Stock		unspecified	Ne-86
Ottawa	Fox Stone Products, Inc. GenLime Group, L.P.	Fox Stone Products, Inc.	Put-in-Bay	Niagaran dolomite (Silurian)	crushed stone — road construction/resurfacing; lime (burned stone) — building, chemical and industrial	Oa-18
		GenLime Group, L.P.	Clay		unspecified	Oa-1
		Marblehead	Danbury	Columbus Limestone (Devonian)	crushed stone — riprap, portland cement concrete, asphaltic concrete, road construction/resurfacing, commercial building	Oa-7
		Rocky Ridge	Benton		crushed stone — riprap, portland cement concrete, asphaltic concrete, road construction/resurfacing	Oa-14
Paulding	The France Stone Co. Lafarge Corp. Stoneco, Inc.	White Rock Quarry	Allen	Guelph Dolomite (Silurian)	crushed stone — riprap, flux stone, road construction/resurfacing, other: stone for portland cement manufacture, aglime	Oa-6
		Paulding	Crane	Tenmile Creek Dolomite (Devonian)	crushed stone — riprap, road construction/resurfacing	Pg-7
		Paulding Quarry	Crane	Detroit River Group & Dundee Limestone (Devonian)	stone for portland cement manufacture	Pg-1
		Auglaize Quarry	Auglaize	Detroit River Group & Dundee Limestone (Devonian)	crushed stone — riprap, flux stone, portland cement concrete, asphaltic concrete, road construction/resurfacing, commercial building, railroad ballast, other, aglime	Pg-2
Perry	Maxville Quarries, Inc.	Maxville Quarries, Inc.	Monday Creek	Maxville Limestone (Mississippian)	crushed stone — road construction/resurfacing; unspecified	Py-235
Pickaway	Melvin Stone Co.	Maxville Quarries, Inc.	Monday Creek		crushed stone — road construction/resurfacing	Py-343
		Melvin Stone Co.	Perry	Columbus Limestone (Devonian)	crushed stone — riprap, portland cement concrete, asphaltic concrete, road construction/resurfacing, commercial building, residential/farm use	Pky-4
Pike	Latham Limestone, Inc.	Latham Limestone, Inc.	Mifflin	Greenfield Dolomite (Silurian)	crushed stone — riprap, portland cement concrete, road construction/resurfacing; aglime	Pke-13
Preble	Wysong Stone Co.	Wysong Stone Co.	Twin	Brassfield Limestone (Silurian)	crushed stone — riprap, road construction/resurfacing, ice control, dimension stone	Pre-5
Putnam	Putnam Stone Co.	Putnam Stone Co.	Pleasant, Riley	Silurian	crushed stone — riprap, portland cement concrete, road construction/resurfacing	Pm-2
Sandusky	Gotttron Bros. Co.	Gotttron Bros. Co.	Sandusky	Niagaran dolomite (Silurian)	crushed stone — portland cement concrete, road construction/resurfacing, commercial building, fill	Sy-5

Seneca	Martin Marietta Magnesiaspecialties, Inc.	Woodville Quarry	Woodville	Guelph Dolomite (Silurian)	crushed stone — road construction/resurfacing, lime (burned stone) — chemical and industrial	Sy-1
	Redland Ohio, Inc.	Woodville Plant	Woodville	Silurian	crushed stone — flux stone, road construction/resurfacing; aglime; lime (burned stone) — chemical and industrial, other	Sy-3 ³
	The France Stone Co.	Bloomville	Bloom	Columbus & Delaware Limestones (Devonian)	crushed stone — riprap, road construction/resurfacing; aglime	Sa-3
Shelby	North Shore Stone Quarries, Inc.	Flat Rock	Thompson	Columbus & Delaware Limestones (Devonian)	crushed stone — riprap, road construction/resurfacing; aglime	Sa-1
	Premier Services Corp.	North Shore Stone Quarries, Inc.	Thompson		crushed stone — riprap, dimension stone	Sa-8
	Miami River Stone Co.	Premier Services Corp.	Liberty	Cedarville Dolomite (Silurian)	unspecified	Sa-2
Tuscarawas	Sidney Sand & Gravel Co.	Rock Run Quarry	Orange		crushed stone — riprap, road construction/resurfacing	Shy-6
	Spring Creek Corp.	River Quarry	Washington		crushed stone — road construction/resurfacing, commercial building	Shy-16
	Belden Brick Co.	Moonaw Pit	Clinton	Vanport limestone (Pennsylvanian)	crushed stone — commercial building	Shy-15
Union	Kimble Clay & Limestone Co.	Kimble Clay & Limestone Co.	Sugar Creek	Vanport limestone (Pennsylvanian)	crushed stone — unspecified	Ts-1517
	Winfield Clay	Winfield Clay	Dover		crushed stone — riprap, road construction/resurfacing	Ts-1818
	Northwood Stone & Asphalt Co.	Rockhold Division	Dover		crushed stone — road construction/resurfacing	Ts-2047
Van Wert	Union Aggregates Co.	Union Limestone Plant	York	Columbus Limestone (Devonian)	crushed stone — riprap, road construction/resurfacing; aglime	Un-1
	Ridge Township Quarry	Ridge Township Quarry	Mill Creek	Tymochtee Dolomite (Silurian)	crushed stone — riprap, other; aglime	Un-2
	Stoneco, Inc.	Scott Quarry	Ridge		crushed stone — road construction/resurfacing	Vt-7
Vinton	Suever Stone Co., Inc.	Delphos Quarry	Union		crushed stone — riprap, portland cement concrete, asphaltic concrete, road construction/resurfacing, other	Vt-3
	Quality Stone Co.	Route 32	Washington	Tymochtee Dolomite (Silurian)	crushed stone — portland cement concrete, road construction/resurfacing, commercial building, railroad ballast, driveway use	Vt-1
	The France Stone Co.	Custar	Clinton		unspecified	Vn-193
Wood	MacRitchie Materials, Inc.	MacRitchie Materials, Inc.	Milton	Lockport & Salina Dolomites (Silurian)	crushed stone — riprap, road construction/resurfacing	Wd-5
	Precision Aggregate, Inc.	Precision Aggregate II	Perry		unspecified	Wd-1
	Stoneco, Inc.	Lime City Quarry	Portage		crushed stone — portland cement concrete, commercial building, other	Wd-14
		Portage Quarry	Perrysburg	Greenfield & Lockport Dolomites (Silurian)	crushed stone — riprap, portland cement concrete, asphaltic concrete, road construction/resurfacing, other; aglime	Wd-6
			Portage		crushed stone — riprap, portland cement concrete, asphaltic concrete, road construction/resurfacing, other	Wd-11

²See also Guernsey County.
³Information for Sy-3 includes information for Sy-4.

1994 OHIO DIRECTORY OF LIMESTONE/DOLOMITE MINE OPERATORS REPORTING SALES OR PRODUCTION, BY COUNTY — Continued

County	Name of operator	Name of mine or quarry	Township	Geological unit	Type and principal use	State mine number
Wyandot	McCarthy Stone Quarry	McCarthy Stone Quarry	Pitt	Bass Islands Group (Silurian)	crushed stone — asphaltic concrete, road construction/resurfacing	Wt-3
	National Lime & Stone Co.	Carey Plant	Crawford	Silurian	crushed stone — riprap, flux stone, commercial building, railroad ballast, extenders, fillers; aglime: lime (burned stone) — chemical and industrial	Wt-1
	Wyandot Dolomite, Inc.	Wyandot Dolomite, Inc.	Crawford	Greenfield & Guelph Dolomites (Silurian)	crushed stone — riprap, flux stone, portland cement concrete, asphaltic concrete, road construction/resurfacing, commercial building, railroad ballast, manufacturing sand, sinter; aglime	Wt-8

1994 SAND AND GRAVEL COMPANIES WITH SALES OR PRODUCTION

Company	No. of operations	Sales (tons)	Production (tons)	Company	No. of operations	Sales (tons)	Production (tons)
A-1 All Ohio Sand & Gravel Co.	1	38,461	38,461	Erie Sand & Gravel Co.	1 dredger	33,116	33,116
Agg Rok Materials	1	611,338	602,640	Craig Fankhauser	1	4,109	4,109
William Albert, Inc.	1	23,239	24,940	Feikert Sand & Gravel, Inc.	1	122,322	122,322
Allgeier & Son, Inc.	2	46,150	46,150	Fenner Sand & Gravel, Inc.	1	188,000	188,000
American Aggregates Corp.	16	8,315,018	7,767,328	Fleckenstein Farm Gravel Pit	1	1,544	1,544
American Sand & Gravel	3	916,700	916,700	Flesher Sand & Gravel, Inc.	1	62,800	62,800
Apache Aggregate & Paving Co.	1	110,386	101,547	Fouremen's Sand & Gravel, Inc.	1	47,937	41,858
Ashcraft Sand & Gravel, Inc.	1	82,351	82,351	Friendsville Sand, L.P.	1	67,311	67,311
Atlas Towing Co.	1	19,052	10,909	Frye Sand & Gravel, Inc.	1	1,831	1,831
ATS Enterprises	1	446,821	442,471	Ganges Gravel	1	703	703
Aurora Sand & Gravel, Inc.	1	229,716	223,495	John L. Garber Materials, Inc.	1	354,233	362,700
B & D Paving Co.	1	7,080	7,080	Al Gasser Excavating, Inc.	1	5,125	5,125
Baker Sand, Inc.	1	871,528	871,528	Gaston Bowling, Inc.	1	1,612	720
Barrett Paving Materials, Inc.	1	267,000	320,000	Geiger Sand & Gravel	1	22,510	41,410
Beaver Excavating, Inc.	1	4,000	4,000	Gerken Materials, Inc.	1	173,572	173,572
Beck Sand & Gravel, Inc.	1	276,895	276,895	Gibson Sand & Gravel Co.	1	1,084	1,084
Becky Lane Trucking, Inc.	1	64,056	64,056	David B. Good	1	2,674	2,574
Paul D. Beery Trucking Co.	1	11,322	180	Good Builders	1	569	569
Benco Leasing, Inc.	1	33,956	40,331	Goodwin Sand & Gravel, Inc.	1	38,032	0
Big Walnut Sand & Gravel, Inc.	1	40,000	40,000	The Gravel Co.	1	34,028	34,028
Black Top Contracting, Inc.	1	16,346	16,346	Green Oaks Potting Products, Inc.	1	292	292
E. E. Blair Construction Co.	1	114,958	114,958	Gregory Materials Co.	1	2,991	2,991
Bolin & Bartley, Inc.	2	129,596	118,898	Grimes Excavating	1	45,000	45,000
D.H. Bowman & Sons, Inc.	1	38,434	45,663	H & H Utilities Co.	1	2,657	2,657
Boyd Gravel Co.	2	519,752	538,868	Norman Harpster	1	250	250
Briggs Sand & Gravel, Inc.	1	10,400	10,400	Harrison Sand & Gravel Co.	1	87,232	105,000
Broadway Sand & Gravel, Inc.	1	53,450	53,450	Haubeil & Sons Asphalt & Materials, Inc.	1	45,115	45,115
Broshear Contractors, Inc.	1	14,026	14,026	Haueter Sand & Gravel, Inc.	1	276,207	276,207
Karl Brugmann Sand & Gravel, Inc.	1	66,812	66,812	Heer Excavating, Inc.	1	27,503	27,503
Oscar Brugmann Sand & Gravel, Inc.	1	579,129	674,000	Heiser Sand & Gravel Co.	3	144,003	144,003
Buckeye Excavating	1	18,793	18,793	Paul N. Herdman	1	6,000	6,000
James Bunnell, Inc.	2	604,995	604,995	Hidden Harbour Partners	1	147,864	147,864
Burlington Sand & Gravel Co.	1	4,339	4,339	Hillsdale Sand & Gravel, Inc.	1	16,436	0
Canton Aggregate	3	879,386	857,881	Hilltop Aggregate, Inc.	1	493,285	493,285
Carter & Carter, Inc.	1	974	974	Hilltop Basic Resources, Inc.	2	1,683,985	1,210,611
Cedar Heights Clay Co.	1	458	458	Hilltop Basic Resources, Inc., dba Enon Washed Sand & Gravel Co.	1	410,967	322,563
Jeff Chaney	1	16,045	16,045	William A. Hoffman, Jr.	1	8,404	8,404
Charlestown Sand & Gravel, Inc.	1	37,630	37,630	Tom Hollinger Excavating	1	880	880
Chesterhill Stone Co.	1	255,499	250,749	Hugo Sand Co.	1	281,413	281,413
Chesterville Sand & Gravel Co., Inc.	1	131,045	131,045	Hutson Road Mining Co.	1	1,588	1,588
Chillicothe Sand & Gravel Co.	1	254,572	289,636	J. P. Sand & Gravel Co.	1	531,293	531,293
M.J. Coates Construction Co.	1	60,743	60,743	Jarrett Sand Co.	1	2,079	2,079
Cochran Transportation Services, Inc.	1	61,998	61,998	Jaymar, Inc.	1	119,956	119,928
Boone Coleman	1	4,930	4,930	Jefferson Materials Co.	1	217,457	217,457
Cremeans Concrete & Supply	1	3,461	3,461	Jimsco, Inc.	1	7,064	7,064
Crosby Gravel	1	450	450	Johnson Rd. Sand & Gravel, Inc.	1	14,485	14,485
R.A. Cruise Sand & Gravel, Inc.	1	73,343	73,343	John E. Jones Construction Co.	1	2,800	2,800
D & D Sand Bank	1	900	0	Joseph Sand & Gravel, Inc.	1	3,137	3,137
D & K Materials, Inc.	1	14,028	12,741	Karg Sand & Gravel Co.	1	75,000	75,000
D & W Sand & Gravel	1	6,344	6,344	Keener Sand & Clay Co.	1	338	338
Darby Gravel Co.	1	5,676	5,676	Kinsman Sand & Gravel Co.	1	62,841	38,633
Davis Sand & Gravel	1	3,927	3,927	Kipp's Gravel Co., Inc.	1	164,493	164,493
DeMilta Sand & Gravel, Inc.	1	350	350	Kirby's Sand & Gravel, Inc.	2	53,739	53,739
Demmy Construction, Inc.	1	33,636	33,636	Leonard E. Kleilein	1	75,130	75,130
Demmy Sand & Gravel	1	9,054	9,054	T & K Kuhnle Co.	1	101,530	101,530
A. J. Diana Sons, Inc.	1	6,175	6,115	L & I Natural Resources, Inc.	1	173,256	173,256
Dingledine Basic Materials, Inc.	1	128,390	128,390	Lake Hope Asphalt, Inc.	1	51,575	27,023
Don's Dozer Service, Inc.	1	1,397	1,397	Lakeside Sand & Gravel Co.	1	276,971	276,971
James E. Downard	1	391	0	Lancaster Sand & Gravel Co.	1	640,847	640,847
Dravo Basic Materials Co., Inc.	8	2,201,219	2,750,039	Larkin Sewer Contractors, Inc.	1	1,654	0
Dry Creek Gravel Co.	2	188,781	180,860	Leetonia Sand & Gravel Co., Inc.	1	16,414	15,592
C. E. Duff & Son, Inc.	2	118,334	118,334	Bertha A. Leonard	1	400	400
E.A. Construction, Inc.	1	80	80	Letart Corp.	1	4,154	4,154
Easton Resources, Inc.	1	1,040	1,040	Carroll Lifer Excavating, Inc.	1	464	464
Eaton Sand & Gravel Co.	1	3,000	3,000	Loxley Aggregates, Inc.	1	7,183	7,183
David E. Edington	1	2,992	2,992				
Embryo, Inc.	1	103,633	112,771				
Erie Blacktop, Inc.	1	387	243				

1994 SAND AND GRAVEL COMPANIES WITH SALES OR PRODUCTION — Continued

Company	No. of operations	Sales (tons)	Production (tons)	Company	No. of operations	Sales (tons)	Production (tons)
Luburgh, Inc.	1	12,000	12,000	Sandman Sand & Stone, Inc.	2	175,443	175,443
Lucky Sand & Gravel Co.	1	44,330	44,330	Sant Sand & Gravel, Inc.	1	168,333	178,052
M & J Sand & Gravel, Inc.	2	32,392	32,392	Guy Schieve	1	14,915	14,915
Donald Martin Contracting	1	410	410	Schloss Materials Co.	1	63,894	63,384
Mason's Sand & Gravel Co.	1	96,441	96,441	Scioto Sand & Gravel	1	1,062	0
Massillon Materials, Inc.	1	484,559	484,559	Scioto Valley Resources	1	255,169	225,649
Massillon Washed Gravel Co.	1	312,308	312,308	Seaway Sand & Stone, Inc.	1	145,432	145,432
Bill McKeever Excavating, Inc.	1	3,542	3,542	Seville Sand & Gravel, Inc.	1	373,728	373,728
Mecco, Inc.	1	389,013	389,013	Shamrock Materials, Inc.	1	605,706	605,706
Mechanicsburg Sand & Gravel, Inc.	1	243,283	219,858	R. W. Sidley, Inc.	2	101,500	101,500
Meigs County Commissioners	1	15,960	15,960	Sidney Sand & Gravel Co.	3	213,976	213,976
Melvin Stone Co.	2	164,863	151,419	Simak Trucking, Inc.	1	46,673	46,673
Menuz Bros. Sand & Gravel, Inc.	1	150,920	150,920	Small's Sand & Gravel, Inc.	2	243,419	243,419
Mesenburg Bros., Inc.	1	612	612	Sober Sand & Gravel Co.	1	1,000	600
Mickley Gravel Co.	1	1,500	215	Soehnlén Bros. Sand & Gravel Co.	1	77,003	76,971
Miller Bros. Construction, Inc.	1	2,065	2,065	Solomon's Mines, Inc.	1	69,974	69,974
Miller Bros. Gravel, Inc.	1	221,689	155,031	Solon Excavators Sand & Gravel, Inc.	3	290,259	268,408
Miller Sand & Gravel, Inc.	1	2,295	2,295	Soltis Sand & Gravel	1	71	71
Moore's Excavating Co.	2	71,541	54,793	Southern Ohio Aggregates, Inc.	4	7,800	7,800
Morrow Gravel Co.	1	380,673	380,673	Southern Ohio Sand & Gravel, Inc.	1 ²	29,392	29,392
Muskingum River Gravel Co.	4	397,750	397,750	Spring Creek Corp.	3	332,464	332,464
National Aggregates, Inc.	1	264,362	264,362	Spring Industries, Inc.	2	169,713	281,800
National Lime & Stone Co.	3	453,782	340,935	Springfield Sand & Gravel Co.	1	518,127	518,127
Neer's Sand & Gravel	1	132,897	138,414	Standard Lafarge	2	825,242	803,251
Nelson Sand & Gravel, Inc.	1	15,000	15,000	Stewart & Reichman, Inc.	1	60,716	60,716
Nelson Transfer, Inc.	1	23,277	23,277	Stillwater Sand & Gravel, Inc.	1	201,443	201,328
Newbury Sand & Gravel	1	37,219	37,219	Stocker Sand & Gravel Co.	2	944,244	944,244
New Carlisle Sand & Gravel Co.	1	1,834	1,834	Stoneco, Inc.	1	286,162	286,162
Newton Asphalt Paving, Inc.	1	101,181	101,181	Sunshine Sand Co.	1	2,315	2,315
Nick's Trucking	1	8,200	8,200	T.K. Stone Co., Inc.	1	4,316	5,787
Northern Ohio Materials, Inc.	2	331,962	331,962	Tackett Builders	1	546	546
Northern Ohio Paving Co.	1	231,825	231,825	Teague Gravel Co., Inc.	1	100,084	94,910
Carl E. Oeder & Sons Sand & Gravel	1	457,673	457,673	Thiel Construction Co.	1	8,575	5,503
Olen Corp.	4	2,573,931	2,831,629	Tipp Stone Co., Inc.	2	60,552	60,552
Oneida Sand & Gravel, Inc.	1	75,796	71,563	Tri-State Asphalt Products	1	221,724	258,515
Osborne Materials Co.	1 dredger	132,237	132,237	Trout Sand & Gravel Co.	1	44,125	44,125
Oster Sand & Gravel, Inc.	2	633,583	633,583	Tuffco Sand & Gravel, Inc.	1	104,177	113,851
Ours Sand & Gravel	1	5,710	5,710	Union Aggregates Co.	1	34,889	31,530
Penn Eagle Coal Corp.	1	46	46	Valley Gravel	1	1,494	1,139
Penry Stone Co.	1	48,890	48,890	Valley Materials Co.	1	76,093	76,093
Phillips Sand & Gravel	1	576,299	576,299	Van Wey Sand & Gravel, Inc.	1	681,091	706,300
Piketon Sand & Gravel	1	417,778	448,314	Ralph C. Wagner & Sons	1	160	100
Portage Lakes Sand & Gravel Co.	1	182,027	182,027	Tommie G. Walters	1	1,660	1,660
Powell Gravel & Topsoil, Inc.	1	288,426	288,426	Ward Materials, Inc.	1	45,197	60,727
Prairie Lane Sand & Gravel Co.	1	147,272	147,272	Watson Gravel, Inc.	4	2,243,718	2,243,718
Precision Aggregate, Inc.	1	38,305	59,305	Weber Sand & Gravel, Inc.	1	174,782	174,782
Quality Ready Mix, Inc.	1	75,244	75,244	Hoyle Weddle	1	5,000	5,000
R & S, Inc.	1	6,075	6,075	Weidle Sand & Gravel, Inc.	2	489,525	489,525
Rack Sand, Inc.	1	2,200	2,200	Welch Sand & Gravel, Inc.	3	770,377	770,377
Rainbow Sand & Gravel, Inc.	1	64,980	64,980	Mark Williams Blacktop Co., Inc.	1	19,074	45,253
John P. Raisch, Inc.	1	7,750	7,750	Willowbrook	1	5,231	5,231
Red Brush Peat Co.	1	1,310	1,310	Gene T. Wilson	1	1,700	1,700
Richards & Son, Inc.	1	576,789	576,789	Wise Gravel	1	607	607
Richards Farms, Inc.	1 ¹	5,628	5,628	Wysong Gravel Co.	2	360,597	360,597
Ries Sand & Gravel	1	1,065	1,065	X L Sand & Gravel	1	57,300	57,300
Riverside Sand & Gravel Co., Inc.	1	30,758	30,758	Xenia Sand, Gravel & Asphalt Co.	1	1,758	916
Gary Roberts Excavating	1	1,342	1,342	Young's Sand & Gravel Co.	3	353,528	353,528
Rogers Group, Inc., dba Norwalk Sand & Gravel	1	266,423	266,423	Zink Petroleum Corp., dba State Rte. 416 Sand & Gravel	1 ³	258,742	258,742
Ross County Gravel Co.	1	223,251	223,251	Zollinger Sand & Gravel Co.	1	83,908	83,908
Rubber City Sand & Gravel Co.	1	135,449	135,449				
Rupp Construction, Inc.	2	112,447	112,447				
S & S Aggregate, Inc.	4	341,000	341,000	TOTAL: 257 companies	332	51,573,324	51,299,688
G. M. Sader Excavating & Paving, Inc.	1	1,037	228				
Salt Creek Materials, Inc.	1	384	0				
Samco, Inc.	1	431,018	431,018				

¹This mine was operated 1st quarter 1994 by Richards Farms, Inc. and 2nd through 4th quarters 1994 by Melvin Stone Co. and is not included in the total number of mines.²This mine was operated 1st quarter 1994 by Southern Ohio Sand & Gravel, Inc. and 2nd through 4th quarters 1994 by Powell Gravel & Topsoil, Inc. and is not included in the total number of mines.³This mine was operated 1st and 2nd quarters 1994 by Zink Petroleum Corp. dba State Route 416 Sand & Gravel and 3rd and 4th quarters 1994 by Northern Ohio Materials, Inc. and is not included in the total number of mines.

Name of operator		Permitted dredging areas	Principal use
Erie Sand & Gravel Co. Osborne Materials Co.	Vermilion-Lorain Area "A," Vermilion-Lorain Area "B"	building	portland cement concrete, asphaltic concrete, road construction/resurfacing
	Fairport		

1994 OHIO DIRECTORY OF SAND AND GRAVEL MINING OPERATORS REPORTING SALES OR PRODUCTION, BY COUNTY

For those mines for which the Division of Mines has not assigned a state mine number, a letter designation is used (example: Ald-G).

County	Name of operator	Name of pit	Township	Type and principal use	State mine number
Allen	Ward Materials, Inc.	Ward Materials, Inc.	Monroe	sand — asphaltic concrete, filtration gravel — building, filtration, other	An-15
	Bolin & Bartley, Inc.	Simington Rd.	Montgomery	sand — unspecified gravel — unspecified	Ald-16
	David B. Good	David B. Good	Jackson	sand — bank run	Ald-G
	Ries Sand & Gravel	Ries Sand & Gravel	Mohican	gravel — bank run	Ald-9
	Young's Sand & Gravel Co.	Sprang	Green	sand — building, road construction/resurfacing, filtration gravel — building, road construction/resurfacing, other	Ald-7
Ashtabula		Young's Sand & Gravel Co.	Green	gravel — building, road construction/resurfacing, other	Ald-15
		Young's Sand & Gravel Co.	Green	gravel — building, road construction/resurfacing, other	Ald-Y
	Easton Resources, Inc.	Brockway	Plymouth	gravel — unspecified	Asa-22
	Frye Sand & Gravel, Inc.	Frye Sand & Gravel, Inc.	Denmark	sand — unspecified gravel — unspecified	Asa-10
	Kinsman Sand & Gravel Co.	Kinsman Sand & Gravel Co.	Wayne	sand — unspecified gravel — unspecified	Asa-K
	Nelson Sand & Gravel, Inc.	Nelson Sand & Gravel, Inc.	N. Kingsville	gravel — building	Asa-N
	R. W. Sidley, Inc.	Conneaut Pit	Kingsville	sand — building, portland cement concrete, ice grit gravel — building, filtration, pipe bedding	Asa-15
	Simak Trucking, Inc.	Simak Trucking, Inc.	Kingsville	sand — building, road construction/resurfacing, filtration, ice control	Asa-18
				gravel — building, filtration	
	Black Top Contracting, Inc.	Black Top #1	Rome	sand — asphaltic concrete, road construction/resurfacing	As-588
Athens	Cochran Transportation Services, Inc.	Cochran Transportation Services, Inc.	Dover	gravel — asphaltic concrete, road construction/resurfacing	As-595
	Lake Hope Asphalt, Inc.	Lake Hope Asphalt, Inc.	York	sand — building, road construction/resurfacing, other	As-1161
	Olen Corp.	Stewart Plant #4	Rome	sand — asphaltic concrete, other	As-W
	Joseph Sand & Gravel, Inc.	Joseph Sand & Gravel, Inc.	Union	gravel — asphaltic concrete, other	Ae-23
Auglaize	National Lime & Stone Co.	Wapakoneta Plant	Union	sand — building, portland cement concrete	Ae-30
	Quality Ready Mix, Inc.	Quality Pit	Pusheta	gravel — portland cement concrete	Ae-16
				gravel — unspecified	
	Tri-State Asphalt Products	Tri-State Asphalt Products	Mead	sand — portland cement concrete, asphaltic concrete, road construction/resurfacing, ice control, pipe bedding	Bt-74
Butler				gravel — portland cement concrete, asphaltic concrete, filtration, fill, drainage	
	American Aggregates Corp.	Fairfield #711	Fairfield	sand — road construction/resurfacing	Br-35
		Hamilton #710	St. Clair	gravel — road construction/resurfacing	Br-5
				gravel — road construction/resurfacing	

1994 OHIO DIRECTORY OF SAND AND GRAVEL MINING OPERATORS REPORTING SALES OR PRODUCTION, BY COUNTY — Continued

County	Name of operator	Name of pit	Township	Type and principal use	State mine number
Butler (cont.)	Gaston Bowling, Inc.	Gaston Bowling, Inc.	Ross	sand — pipe bedding, bank run	Br-40
	Broshear Contractors, Inc.	Ross Township Gravel	Ross	gravel — building, pipe bedding, bank run	Br-48
	Dingledine Basic Materials, Inc.	Dingledine Basic Materials, Inc.	Milford	sand — unspecified	Br-50
	Dravo Basic Materials Co., Inc.	Fairfield Plant	Fairfield	sand — asphaltic concrete, fill	Br-14
	The Gravel Co.	Ross Plant	Ross	gravel — building, asphaltic concrete, road construction/resurfacing, filtration, fill	Br-29
	Mecco, Inc.	New Miami Pit	St. Clair	sand — road construction/resurfacing	Br-3
	Shamrock Materials, Inc.	Mecco, Inc.	Lemon	gravel — road construction/resurfacing	Br-15
	Southern Ohio Aggregates, Inc.	Shamrock Materials, Inc.	Madison	sand — asphaltic concrete, road construction/resurfacing	Br-52
	Watson Gravel, Inc.	Southern Ohio Aggregates, Inc.	St. Clair	gravel — unspecified	Br-S
	Weidle Sand & Gravel, Inc.	Watson Pit	Fairfield	sand — unspecified	Br-47
Carroll	Weich Sand & Gravel, Inc.	Weidle Sand & Gravel, Inc.	Madison	gravel — building, road construction/resurfacing, fill	Br-6
	National Aggregates, Inc.	Schlichter Pit	Fairfield	gravel — unspecified	Br-38
	Oneida Sand & Gravel, Inc.	National Aggregates, Inc.	Brown	gravel — unspecified	Cl-N
	American Aggregates Corp.	Oneida Sand & Gravel, Inc.	Brown	gravel — unspecified	Cl-204
	D & W Sand & Gravel	Urbana #215	Urbana	gravel — road construction/resurfacing	Cpn-1
Champaign	Bill McKeever Excavating Mechanicsburg Sand & Gravel, Inc.	D & W Sand & Gravel	Union	gravel — road construction/resurfacing	Cpn-21
	Moore's Excavating Co.	Bill McKeever Excavating Mechanicsburg Sand & Gravel, Inc.	Urbana Union	gravel — unspecified	Cpn-24
	T.K. Stone Co., Inc.	Moore's Excavating Co.	Salem	gravel — driveway use	Cpn-22
	American Aggregates Corp.	T.K. Stone Co., Inc.	Wayne	sand — unspecified	Cpn-20
	Barrett Paving Materials, Inc.	Fairborn #413	Bethel	sand — building	Cpn-25
	Demmy Construction, Inc.	Fairborn #141	Mad River	sand — road construction/resurfacing	Cl-13
	Demmy Sand & Gravel	Kieffer Pit	Mad River	gravel — asphaltic concrete, road construction/resurfacing	Cl-28
	Hilltop Basic Resources, Inc. (dba Enon Washed Sand & Gravel Co.)	Demmy Sand & Gravel	Mad River	sand — building	Cl-501
	Hilltop Basic Resources, Inc.	Enon Washed Sand & Gravel Co.	Mad River	gravel — building, fill	Cl-502
	Moore's Excavating Co. Springfield Sand & Gravel Co.	Fairborn Aggregate Plant	Bethel	sand — building, portland cement concrete, asphaltic concrete	Cl-3
Clark	Moore's Excavating Co.	Moore's Excavating Co.	Bethel	gravel — portland cement concrete, asphaltic concrete, fill, base	Cl-41
	Springfield Sand & Gravel Co.	Springfield Sand & Gravel Co.	Moorefield Springfield	gravel — portland cement concrete, asphaltic concrete, fill, base	Cl-29
				gravel — building	Cl-25
				sand — building, portland cement concrete, asphaltic concrete, road construction/resurfacing, fertilizer, golf course sand	
				road construction/resurfacing, ice control, screening	

Clermont	John E. Jones Construction Co. Kipp's Gravel Co., Inc.	John E. Jones Construction Co. Kipp's Gravel Co., Inc.	Washington Stonelik	sand — unspecified gravel — unspecified sand — unspecified gravel — unspecified	Ct-11 Ct-7
Columbiana	Hutson Road Mining Co. Leetonia Sand & Gravel Co., Inc.	Hutson Road Mining Co. Leetonia Sand & Gravel Co., Inc.	Middleton Salem	sand — road construction/resurfacing gravel — driveway use sand — portland cement concrete, asphaltic concrete, road construction/resurfacing, mason sand, fill gravel — building, portland cement concrete, road construction/resurfacing, other	Ca-351 Ca-982
Coshocton	Willowbrook X L Sand & Gravel William Albert, Inc. Apache Aggregate & Paving Co. Boyd Gravel Co.	Willowbrook X L Sand & Gravel William Albert, Inc. Apache Aggregate & Paving Co. Boyd Gravel Co.	Elk Run Middleton Franklin Keene Bethlehem	sand — unspecified gravel — unspecified sand — unspecified gravel — unspecified gravel — unspecified sand — building, road construction/resurfacing, other gravel — building, road construction/resurfacing, filtration, other sand — asphaltic concrete gravel — asphaltic concrete, road construction/resurfacing sand — building, portland cement concrete, road construction/resurfacing, filter sand, leachate gravel — building, portland cement concrete, road construction/resurfacing, other	Ca-993 Ca-881 Cn-828 Cn-783 Cn-694
Crawford	Gibson Sand & Gravel Co.	Gibson Sand & Gravel Co.	Jefferson	sand — unspecified gravel — unspecified	Cd-3
Darke	Fourman's Sand & Gravel, Inc. Tom Hollinger Excavating	Fourman's Sand & Gravel, Inc. Hollinger Gravel Plant	Greenville Harrison	sand — unspecified gravel — unspecified gravel — farm ballast	Dke-4 Dke-10
Defiance	Hillsdale Sand & Gravel, Inc.	Hillsdale Sand & Gravel, Inc.	Farmer	gravel — asphaltic concrete, road construction/resurfacing	De-2
Erie	Jarrett Sand Co. Keener Sand & Clay Co. Mesenburg Bros., Inc.	Jarrett Sand Co. Huron Plant Mesenburg Bros., Inc.	Groton Huron Milan	sand — fill sand — foundry sand — bank run	Ee-29 Ee-5 Ee-24
Fairfield	Paul D. Beery Trucking Co. Davis Sand & Gravel James E. Downard Lancaster Sand & Gravel Co.	Paul D. Beery Trucking Co. Davis Sand & Gravel James E. Downard Lancaster Sand & Gravel Co.	Berne Hocking Rush Creek Berne	sand — unspecified gravel — unspecified sand — unspecified gravel — unspecified sand — portland cement concrete sand — building, portland cement concrete, asphaltic concrete, road construction/resurfacing gravel — building, asphaltic concrete, filtration	Fd-14 Fd-12 Fd-16 Fd-13
Franklin	Agg Rok Materials American Aggregates Corp. Big Walnut Sand & Gravel, Inc. J. P. Sand & Gravel Co. Mason's Sand & Gravel Co. Olen Corp.	Agg Rok Materials Lockbourne #213 Columbus #210 Big Walnut Sand & Gravel, Inc. J. P. Sand & Gravel Co. Mason's Sand & Gravel Co. Hilliard Plant #1	Franklin Hamilton Marion Hamilton, Madison Hamilton Hamilton Brown	sand — building, portland cement concrete, asphaltic concrete, road construction/resurfacing gravel — building, portland cement concrete, asphaltic concrete, road construction/resurfacing sand — road construction/resurfacing gravel — road construction/resurfacing sand — road construction/resurfacing gravel — road construction/resurfacing sand — unspecified gravel — unspecified sand — building gravel — building sand — building gravel — building sand — building gravel — building	Fn-36 Fn-23 Fn-6 Fn-14 Fn-52 Fn-11 Fn-43

¹See also Greene County.

1994 OHIO DIRECTORY OF SAND AND GRAVEL MINING OPERATORS REPORTING SALES OR PRODUCTION, BY COUNTY — Continued

County	Name of operator	Name of pit	Township	Type and principal use	State mine number
Franklin (cont.)	Olen Corp. (cont.)	Columbus Plant #3	Hamilton	sand — building, portland cement concrete, asphaltic concrete gravel — building, portland cement concrete, asphaltic concrete, road construction/resurfacing	Fr-58
	S & S Aggregate, Inc.	Plant #1	Hamilton	sand — unspecified	Fr-24
Fulton	Sandman Sand & Stone, Inc.	County Road 1	Swan Creek	gravel — unspecified	Frn-S
	Tommie G. Walters	Tommie G. Walters	Swan Creek	sand — building, other sand — building	Frn-6
Gallia	Cedar Heights Clay Co.	Gallia Red Sand	Springfield	sand — landscaping	Ga-507
	Cremeans Concrete & Supply Jaymar, Inc.	Cremeans Concrete & Supply Jaymar, Inc.	Addison	sand — fill, bank run	Ga-626
	Ours Sand & Gravel	Ours Sand & Gravel	Addison	gravel — unspecified	Ga-J
	Haueter Sand & Gravel, Inc.	Haueter Sand & Gravel, Inc.	Ohio	sand — unspecified	Ga-O
Geauga	Haueter Sand & Gravel, Inc.	Haueter Sand & Gravel, Inc.	Burton, Newbury	sand — building, portland cement concrete, asphaltic concrete, road construction/resurfacing	Gea-29
	T & K Kuhnle Co.	T & K Kuhnle Co.	Auburn	gravel — filtration, oversize	Gea-TK
	Newbury Sand & Gravel	Newbury Sand & Gravel	Burton, Newbury	sand — unspecified	Gea-N
	Solon Excavators Sand & Gravel, Inc.	Trethewey	Auburn	gravel — unspecified	Gea-40
	Soltis Sand & Gravel	Soltis Sand & Gravel	Parkman	sand — fill	Gea-9
	Teague Gravel Co., Inc.	Teague Gravel Pit	Newbury	gravel — fill	Gea-35
	American Aggregates Corp.	Haines Rd. #419	Beaver Creek	sand — building	Gea-32
	M.J. Coates Construction Co.	Xenia #414	Beaver Creek	gravel — road construction/resurfacing	Gea-33
	Hilltop Basic Resources, Inc.	Spring Valley Gravel #434	Spring Valley	sand — road construction/resurfacing	Gea-42
	Donald Martin Contracting Phillips Sand & Gravel	M.J. Coates Construction Co.	Spring Valley	gravel — road construction/resurfacing	Gea-47
Greene	Watson Gravel, Inc.	Fairborn Aggregate Plant	Bath	sand — building, road construction/resurfacing	Gea-42
	Hoyle Weddle	Donald Martin Contracting Phillips Sand & Gravel	Spring Valley	gravel — building, portland cement concrete, asphaltic concrete	Gea-40
	Xenia Sand, Gravel & Asphalt Co.	Phillips Sand & Gravel	Beaver Creek	gravel — unspecified	Gea-36
	Hoyle Weddle	Spring Valley	Spring Valley	sand — unspecified	Gea-38
	Xenia Sand, Gravel & Asphalt Co.	Hoyle Weddle	Spring Valley	gravel — unspecified	Gea-W
	Allgeier & Son, Inc.	Xenia Sand, Gravel & Asphalt Co.	Xenia	sand — building, portland cement concrete, road construction/ resurfacing	Ge-10
	American Aggregates Corp.	Miami River Rd.	Xenia	sand — unspecified	Hmn-AS1
	Ashcraft Sand & Gravel, Inc. James Bunnell, Inc.	State Route 128	Miami	gravel — unspecified	Hmn-AS
	Crosby Gravel	Harrison #712	Whitewater	sand — building	Hmn-37
		Campbell Rd. #715	Harrison	gravel — unspecified	Hmn-69
Hamilton	American Aggregates Corp.	Ashcraft Sand & Gravel, Inc. James Bunnell, Inc.	Harrison	sand — road construction/resurfacing	Hmn-54
		James Bunnell, Inc.	Whitewater	gravel — road construction/resurfacing	Hmn-50
		Miamitown Sand & Gravel	Whitewater	gravel — building	Hmn-59
			Crosby	sand — other gravel — other gravel — unspecified	Hmn-44

	Dravo Basic Materials Co., Inc.	Newtown Plant Cleves Plant	Anderson Miami	sand — asphaltic concrete, road construction/resurfacing gravel — asphaltic concrete, road construction/resurfacing sand — asphaltic concrete gravel — asphaltic concrete sand — road construction/resurfacing gravel — road construction/resurfacing sand — unspecified gravel — unspecified sand — building, portland cement concrete, road construction/ resurfacing, filtration, ice control gravel — building, portland cement concrete, filtration, base gravel — fill sand — building gravel — building sand — building gravel — building sand — building gravel — building sand — unspecified gravel — unspecified sand — unspecified gravel — unspecified sand — building gravel — building sand — building, portland cement concrete, asphaltic concrete, fill gravel — building, portland cement concrete, road construction/ resurfacing sand — building gravel — building sand — building gravel — building gravel — building	Hmn-11 ³ Hmn-3 ⁴ Hmn-5 Hmn-46 Hmn-17 Hmn-67 Hmn-C Hmn-71 ⁵ Hmn-10 Hmn-S Hmn-SO Hmn-71 ⁵ Hmn-60 Hmn-48 Hmn-42
		Harrison Sand & Gravel Co.	Harrison		Hdn-H Hy-5
		Bertha A. Leonard Nelson Transfer, Inc.	Crosby Miami		Hg-G Hg-301
		Powell Gravel & Topsoil, Inc.	Whitewater		Hs-96 Hs-511
		Rack Sand, Inc. Southern Ohio Aggregates, Inc.	Mill Creek Colerain		Hs-82
		Southern Ohio Aggregates, Inc.	Whitewater		Hrn-16 Hrn-1
		Southern Ohio Sand & Gravel, Inc.	Whitewater		Jfn-PE
		Harrison Pit	Whitewater		Kx-7
		East Miami Pit	Colerain		
		Fernald Pit	Crosby		
		Norman Harpster Gerken Materials, Inc.	Roundhead Liberty		
Hardin Henry		Good Builders Muskingum River Gravel Co.	Green Green, Starr		
		Jeff Chaney	Killbuck, Monroe		
		Feikert Sand & Gravel, Inc.	Salt Creek		
		Menuz Bros. Sand & Gravel, Inc.	Hardy		
		Erie Blacktop, Inc.	Norwalk		
Huron		Rogers Group, Inc. (dba Norwalk Sand & Gravel)	Norwalk		
		Penn Eagle Coal Corp.	Saline		
Jefferson		Goodwin Sand & Gravel, Inc.	Clinton		
Knox					

³See also Clark County⁴Information for Hmn-11 includes information for Hmn-70⁵Information for Hmn-3 includes information for Hmn-64.⁶This mine was operated 1st quarter 1994 by Southern Ohio Sand & Gravel, Inc. and 2nd through 4th quarters 1994 by Powell Gravel & Topsoil, Inc.

1994 OHIO DIRECTORY OF SAND AND GRAVEL MINING OPERATORS REPORTING SALES OR PRODUCTION, BY COUNTY — Continued

County	Name of operator	Name of pit	Township	Type and principal use	State mine number
Knox (cont.)	Mickley Gravel Co.	Mickley Gravel Co.	Union	sand — unspecified gravel — unspecified sand — building, portland cement concrete, asphaltic concrete, ice control	Kx-5
	Olen Corp.	Fredericktown Plant #2	Morris	road construction/resurfacing, ice control	Kx-16
	Sant Sand & Gravel, Inc.	Sant Sand & Gravel, Inc.	Clinton	sand — building, road construction/resurfacing	Kx-3
	Small's Sand & Gravel, Inc.	Killduff Rd.	Harrison	gravel — building, road construction/resurfacing	Kx-15
Lake		Zion Rd.	Harrison	gravel — unspecified gravel — unspecified	Kx-17
	DeMilta Sand & Gravel, Inc.	DeMilta Sand & Gravel, Inc.	Painesville	sand — unspecified gravel — unspecified	Lke-D
	R. W. Sidley, Inc.	Painesville Pit	Painesville	sand — building, portland cement concrete, other gravel — building	Lke-7
	Becky Lane Trucking, Inc.	B & L Sand	Perry	sand — fill	Le-430
Lawrence	Burlington Sand & Gravel Co.	Willow Creek	Perry	sand — fill	Le-426
	D & D Sand Bank	D & D Sand Bank	Perry	sand — unspecified	Le-445
Licking	American Aggregates Corp.	Newark #214	Newark	sand — road construction/resurfacing	Lg-2
	Dry Creek Gravel Co.	Plant #3	Newton	gravel — road construction/resurfacing	Lg-DC
		Plant #2	Washington	sand — portland cement concrete, asphaltic concrete, unspecified gravel — building, portland cement concrete, asphaltic concrete, road construction/resurfacing, unspecified	Lg-31
	Geiger Sand & Gravel	Alexandria Pit	St. Albans	sand — portland cement concrete, asphaltic concrete, other gravel — asphaltic concrete, road construction/resurfacing, other sand — fill, bank run	Lg-W
Logan	Gary Roberts Excavating	Gary Roberts Excavating	Madison	gravel — fill, bank run	Lg-504
	Van Wey Sand & Gravel, Inc.	Van Wey Sand & Gravel, Inc.	Newton	sand — driveway base gravel — driveway base sand — building	Lg-10
				gravel — building	
	C. E. Duff & Son, Inc.	C. E. Duff & Son, Inc.	Lake	sand — filtration	Lgn-36
Lorain	Miller Bros. Construction, Inc.	Miller Bros. Construction, Inc.	Washington	sand — building, portland cement concrete	Lgn-31
			Monroe	sand — unspecified gravel — unspecified	Lgn-M
	Neer's Sand & Gravel	Neer's Sand & Gravel	Union	sand — unspecified gravel — unspecified	Lgn-6
	Guy Schieve	Guy Schieve	Henrietta	sand — building gravel — building	Ln-12
Lucas	Craig Fankhauser	Craig Fankhauser	Swanton	sand — building	Ls-F
	Hidden Harbour Partners	Centennial Rd. Pit	Springfield	sand — building, portland cement concrete	Ls-H
	Sandman Sand & Stone, Inc.	Archbold-Whitehouse Pit	Providence	sand — building, other	Ls-MH
	Seaway Sand & Stone, Inc.	Seaway Sand & Stone, Inc.	Swanton	sand — building	Ls-13
Madison	Tuftco Sand & Gravel, Inc.	Tuftco Sand & Gravel, Inc.	Darby	sand — asphaltic concrete, fill gravel — building, fill, driveway use, parking lots	Mdn-11
				sand — building, filtration gravel — building, filtration	Mg-632
Mahoning	Solomon's Mines, Inc.	Solomon's Mines, Inc.	Green	gravel — building, filtration	Mn-4
Marion	Penry Stone Co.	Penry Stone Co.	Prospect	sand — building, portland cement concrete, filtration gravel — building, portland cement concrete, filtration	Mn-16
	Scioto Sand & Gravel	Scioto Sand & Gravel	Prospect	sand — building, mason sand gravel — fill	Mn-10
	Union Aggregates Co.	Boundary Rd.	Prospect	sand — building gravel — other	

Medina	Baker Sand, Inc.	Baker Sand, Inc.	Harrisville, Westfield	sand — building, asphaltic concrete, road construction/ resurfacing, fill gravel — road construction/resurfacing sand — building sand — building, asphaltic concrete, septic system gravel — building, asphaltic concrete, road construction/ resurfacing	Ma-20 Ma-23 Ma-22
Meigs	Dravo Basic Materials Co., Inc. Letart Corp. Meigs County Commissioners Richards & Son, Inc.	Apple Grove Plant Letart Corp. #4 Meigs County Pit Richards & Son, Inc.	Letart Olive Letart Letart	sand — asphaltic concrete gravel — asphaltic concrete sand — unspecified gravel — unspecified sand — unspecified gravel — unspecified sand — building, asphaltic concrete gravel — building, asphaltic concrete, filtration	Ms-205 Ms-308 Ms-301 Ms-298
Miami	American Aggregates Corp. Fenner Sand & Gravel, Inc. New Carlisle Sand & Gravel Co. Stillwater Sand & Gravel, Inc. Tipp Stone Co., Inc. Wise Gravel B & D Paving Co.	Troy Gravel #433 Woodville Concrete Corp. New Carlisle Sand & Gravel Co. Stillwater Sand & Gravel, Inc. Troy Wise Gravel B & D Paving Co.	Concord Newton Bethel Union Elizabeth Newberry Salem	sand — road construction/resurfacing gravel — road construction/resurfacing sand — unspecified gravel — unspecified sand — fill gravel — fill sand — building gravel — building sand — unspecified gravel — unspecified gravel — building, farm use, bank run sand — bank run gravel — bank run	Mi-3 Mi-4 Mi-501 Mi-504 Mi-12 Mi-9 Me-508
Monroe	American Aggregates Corp. Broadway Sand & Gravel, Inc. Carter & Carter, Inc. H & H Utilities Co. Hilltop Basic Resources, Inc.	Rip Rap Road #416 Broadway Sand & Gravel, Inc. Carter & Carter, Inc. H & H Gravel West Carrollton Aggregate Plant	Wayne Harrison Miami Miami Jefferson, Miami	sand — road construction/resurfacing gravel — road construction/resurfacing sand — building gravel — building gravel — building, road construction/resurfacing sand — unspecified gravel — unspecified sand — building, portland cement concrete, asphaltic concrete, other	My-66 My-65 My-CW My-68 My-19
Montgomery	Jimco, Inc. Miller Bros. Gravel, Inc. John P. Raisch, Inc. Tipp Stone Co., Inc. Weidle Sand & Gravel, Inc.	Taylorsville Rd. Hardfill Miller Bros. Gravel, Inc. John P. Raisch, Inc. Meeker Weidle Sand & Gravel, Inc.	Wayne Butler Jefferson Butler German	gravel — portland cement concrete, asphaltic concrete, fill, base gravel — bank run sand — building, portland cement concrete, mason sand gravel — building, portland cement concrete, asphaltic concrete, road construction/resurfacing, filtration, other gravel — unspecified sand — unspecified gravel — unspecified sand — unspecified gravel — unspecified	My-55 My-52 My-R My-61 My-41
Morgan	Chesterhill Stone Co.	Graham Farm	Windsor	sand — building, portland cement concrete, asphaltic concrete, road construction/resurfacing, filtration gravel — building, portland cement concrete, asphaltic concrete, road construction/resurfacing, filtration	Mon-CSC
Morrow	Chesterville Sand & Gravel Co., Inc.	Chesterville Sand & Gravel Co., Inc.	Chester	sand — building, filtration, landscape, garden sand gravel — building, road construction/resurfacing, filtration, ice control, landscaping	Mw-10
Muskingum	Boyd Gravel Co. Luburgh, Inc. Muskingum River Gravel Co. Salt Creek Materials, Inc.	Jennings-Lacy Luburgh Sand Pit Muskingum River Gravel Co. Salt Creek Materials, Inc.	Cass Falls Wayne Washington	sand — building, portland cement concrete, asphaltic concrete, filtration gravel — building, portland cement concrete, asphaltic concrete, road construction/resurfacing, filtration, roofing gravel sand — unspecified gravel — unspecified sand — unspecified gravel — unspecified sand — road construction/resurfacing gravel — road construction/resurfacing	Mum-799 Mum-267 Mum-228 Mum-216

1994 OHIO DIRECTORY OF SAND AND GRAVEL MINING OPERATORS REPORTING SALES OR PRODUCTION, BY COUNTY — Continued

County	Name of operator	Name of pit	Township	Type and principal use	State mine number
Pickaway	American Aggregates Corp.	Circleville #216	Circleville	sand — road construction/resurfacing	Pky-1
	Darby Gravel Co.	Darby Gravel Co.	Darby	gravel — road construction/resurfacing	Pky-D
	William A. Hoffman, Jr.	Hoffman Pit	Wayne	gravel — screened sand — bank run	Pky-H
	Melvin Stone Co.	Melvin Stone Co.	Circleville, Wayne	gravel — bank run	Pky-R ^s
	Richards Farms, Inc.	Richards Farms, Inc.	Wayne	sand — asphaltic concrete	Pky-AAC
	Valley Gravel	Valley Gravel	Circleville, Wayne	gravel — portland cement concrete, asphaltic concrete	Pky-R ^s
	Gene T. Wilson	Gene T. Wilson	Darby	sand — building, filtration, ice control	Pky-C
	Gregory Materials Co.	Plant #1	Darby	gravel — building, other	Pky-W
	Piketon Sand & Gravel	Cutlip	Scioto	sand — unspecified	Pke-30
	Valley Materials Co.	Valley Materials Co.	Scioto	gravel — unspecified	Pke-24
Pike	American Sand & Gravel	American Sand & Gravel	Suffield	sand — unspecified	Pke-26
	Aurora Sand & Gravel, Inc.	Aurora Sand & Gravel, Inc.	Aurora	sand — unspecified	Pe-ASG
	Beck Sand & Gravel, Inc.	Beck Sand & Gravel, Inc.	Shalersville	gravel — asphaltic concrete	Pe-84
	Karl Brugmann Sand & Gravel, Inc.	Karl Brugmann Sand & Gravel, Inc.	Shalersville	gravel — unspecified	Pe-50
	Oscar Brugmann Sand & Gravel, Inc.	Oscar Brugmann Sand & Gravel, Inc.	Shalersville	sand — building	Pe-15
	Charlestown Sand & Gravel, Inc.	Charlestown Sand & Gravel, Inc.	Shalersville	gravel — unspecified	Pe-9
	R. A. Cruise Sand & Gravel, Inc.	R. A. Cruise Sand & Gravel, Inc.	Charlestown	gravel — unspecified	Pe-17
	D & K Materials, Inc.	D & K Materials, Inc.	Franklin, Ravenna	sand — building, fill	Pe-45
	Don's Dozer Service, Inc.	Don's Dozer Service, Inc.	Brimfield	gravel — building, filtration, driveway use	Pe-101
	Green Oaks Potting Products, Inc.	Green Oaks Hilltop Aggregate, Inc.	Streetsboro	sand — building, portland cement concrete, asphaltic concrete, road construction/resurfacing	Pe-96
Portage	Hilltop Aggregate, Inc.	Hilltop Aggregate, Inc.	Franklin	gravel — fill	Pe-89
	Hugo Sand Co.	Hugo Sand Co.	Suffield	sand — soil mix	Pe-56
	Jefferson Materials Co.	Jefferson Materials Co.	Franklin	sand — building, portland cement concrete, asphaltic concrete, backfill	Pe-10
	Johnson Rd. Sand & Gravel	Johnson Rd. Sand & Gravel	Streetsboro	gravel — building, asphaltic concrete, road construction/resurfacing, backfill, bank run	Pe-63
	Karg Sand & Gravel Co.	Karg Sand & Gravel Co.	Franklin	sand — building, road construction/resurfacing, other	Pe-98
	Lakeside Sand & Gravel Co.	Lakeside Sand & Gravel Co.	Brimfield	gravel — building, road construction/resurfacing, other	Pe-83
	Lucky Sand & Gravel Co.	Lucky Sand & Gravel Co.	Shalersville	gravel — building, road construction/resurfacing	Pe-40
	Miller Sand & Gravel, Inc.	Miller Sand & Gravel, Inc.	Mantua	sand — road construction/resurfacing	Pe-L
			Windham	gravel — road construction/resurfacing	Pe-39
				gravel — building, backfill	

Preble	Northern Ohio Materials, Inc.	Northern Ohio Materials, Inc.	Streetsboro	sand — building, portland cement concrete	Pe-85
	Rainbow Sand & Gravel, Inc.	Rainbow Sand & Gravel, Inc.	Shalersville	gravel — building	Pe-64
	Red Brush Peat Co.	Red Brush Peat Co.	Franklin	sand — unspecified	Pe-61
	S & S Aggregate, Inc.	Twin Lakes Sand, Inc.	Shalersville, Streetsboro	gravel — fill, soil mix	Pe-59
	Schloss Materials Co.	Twin Lakes Sand, Inc.	Streetsboro	sand — unspecified	Pe-67
	Sober Sand & Gravel Co.	Schloss Materials Co.	Mantua	gravel — unspecified	Pe-60
	Solon Excavators Sand & Gravel, Inc.	Sober Sand & Gravel Co.	Rootstown	gravel — asphaltic concrete	Pe-18
		Solon Excavators Sand & Gravel, Inc.	Mantua	sand — road construction/resurfacing, pipe bedding	Pe-SE
		Solon Excavators Sand & Gravel, Inc.	Mantua	gravel — building	Pe-36
	Standard Lafarge	Shalersville	Shalersville	sand — unspecified	Pe-68
Richland	Sunshine Sand Co.	Shalersville Portable Sunshine Sand Co.	Shalersville Streetsboro	sand — building, portland cement concrete, asphaltic concrete, road construction/resurfacing	Pe-SS1 Pe-SSC
	Loxley Aggregates, Inc.	Loxley Aggregates, Inc.	Twin	gravel — unspecified	Pre-9
	Southern Ohio Aggregates, Inc.	Southern Ohio Aggregates, Inc.	Gratis, Lanier	sand — building, filtration, baseball diamond mix, fill	Pre-7
	Wysong Gravel Co.	Camden Plant	Somers	gravel — building, filtration, fill, parking lot base	Pre-4
		West Alexandria Plant	Twin	sand — unspecified	Pre-6
	Bolin & Bartley, Inc.	Bolin & Bartley Sand & Gravel	Weller	gravel — building, portland cement concrete, asphaltic concrete, road construction/resurfacing	Rd-20
	D. H. Bowman & Sons, Inc.	D. H. Bowman & Sons, Inc.	Jefferson	sand — asphaltic concrete, backfill, pipe bedding	Rd-4
	Ganges Gravel	Ganges Gravel	Cass	gravel — building, asphaltic concrete, road construction/resurfacing, filtration, backfill, pipe bedding	Rd-18
	John L. Garber Materials, Inc.	John L. Garber Materials, Inc.	Troy	sand — unspecified	Rd-14
	Leonard E. Klelein	Leonard E. Klelein	Monroe	gravel — building	Rd-K
Ross	Carroll Lifer Excavating, Inc.	Honey Creek Sand & Gravel	Jefferson	sand — road construction/resurfacing	Rd-L
	Chillicothe Sand & Gravel Co.	Chillicothe Sand & Gravel Co.	Springfield	gravel — road construction/resurfacing	Rs-27
	David E. Edington	David E. Edington	Concord	sand — building, road construction/resurfacing, fill, bank run	Rs-E
	Haubeil & Sons Asphalt & Materials, Inc.	Haubeil & Sons Asphalt & Materials, Inc.	Springfield	gravel — building	Rs-H
	Muskingum River Gravel Co.	Muskingum River Gravel Co.	Jefferson	sand — building, road construction/resurfacing	Rs-M
	Ross County Gravel Co.	Ross County Gravel Co.	Scioto	gravel — road construction/resurfacing	Rs-R
	Tackett Builders	Tackett Builders	Springfield	gravel — unspecified	Rs-T
				sand — asphaltic concrete, ice control	
				gravel — building, asphaltic concrete, road construction/resurfacing, ice control	
				gravel — building, road construction/resurfacing, other	

^eThis mine was operated 1st quarter 1994 by Richards Farms, Inc. and 2nd through 4th quarters 1994 by Melvin Stone Co.

1994 OHIO DIRECTORY OF SAND AND GRAVEL MINING OPERATORS REPORTING SALES OR PRODUCTION, BY COUNTY — Continued

County	Name of operator	Name of pit	Township	Type and principal use	State mine number
Scioto	E. E. Blair Construcion Co.	Blair Pit	Porter	sand — building, road construction/resurfacing	So-98
	Boone Coleman	Boone Coleman	Washington	gravel — building	So-B
	Scioto Valley Resources	Scioto Valley Resources Division	Valley	sand — building	So-100
	ATS Enterprises	Haverhill	Green	sand — road construction/resurfacing	So-79
				sand — building, road construction/resurfacing	
Shelby	Fleckenstein Farm Gravel Pit	Fleckenstein Farm Gravel Pit	McLean	sand — fill	Shy-12
				gravel — fill	
	Sidney Sand & Gravel Co.	Staley Pit	Clinton, Salem	sand — road construction/resurfacing, unspecified	Shy-SS
		Wagner Pit	Orange	gravel — bank run, backfill	Shy-S
		Milligan & Milligan-Washington Twp. Pit	Washington	sand — unspecified	Shy-13
	Spring Creek Corp.	Pence Deposit	Washington	gravel — unspecified	Shy-11
		Jones Deposit	Washington	sand — building	Shy-18
		"H" Mine	Washington	gravel — building, portland cement concrete	Shy-SC
				sand — building, portland cement concrete, asphaltic concrete	
				gravel — building, portland cement concrete, asphaltic concrete	
				sand — portland cement concrete	
	American Sand & Gravel	American Sand & Gravel	Jackson	gravel — portland cement concrete	Sk-203
		Crystal Springs	Jackson	sand — unspecified	Sk-243
	Beaver Excavating, Inc.	Stone Products	Canton	gravel — unspecified	Sk-BE
Stark	Canton Aggregate	Canton Aggregate	Jackson	sand — road construction/resurfacing, other	Sk-689
		Canton Aggregate	Perry	gravel — road construction/resurfacing, other	Sk-CA
		Canton Aggregate	Plain	sand — portland cement concrete, asphaltic concrete, other	Sk-681
	A. J. Diana Sons, Inc.	Neidert Pit	Lawrence	gravel — portland cement concrete, asphaltic concrete, other	Sk-694
	Heiser Sand & Gravel Co.	Heiser Sand & Gravel Co.	Jackson	sand — unspecified	Sk-688
		Heiser Sand & Gravel	Jackson	gravel — unspecified	Sk-HS
		Heiser Sand & Gravel	Jackson	sand — building	Sk-HS1
		Massillon Materials, Inc.	Perry	gravel — unspecified	Sk-M
	Massillon Washed Gravel Co.	Massillon Washed Gravel Co.	Bethlehem	sand — road construction/resurfacing, backfill	Sk-607
	Northern Ohio Paving Co.	Northern Ohio Paving Co.	Perry	gravel — road construction/resurfacing	Sk-N
	Oster Sand & Gravel, Inc.	Massillon Plant	Jackson, Perry	sand — unspecified	Sk-165
				gravel — building, portland cement concrete, asphaltic concrete, ice control, fill	
				gravel — building, asphaltic concrete, road construction/resurfacing, ice control, fill	
	Rupp Construction, Inc.	Rupp Construction, Inc.	Jackson	sand — building, unspecified	Sk-R
	Ralph C. Wagner & Sons	Ralph C. Wagner & Sons	Bethlehem	gravel — building, road construction/resurfacing, unspecified	Sk-W
				sand — road construction/resurfacing	
Summit	A-1 All Ohio Sand & Gravel Co.	A-1 All Ohio Sand & Gravel Co.	Coventry	gravel — road construction/resurfacing, bank run	St-50
	Flesher Sand & Gravel, Inc.	Flesher Sand & Gravel, Inc.	Norton	gravel — bank run	St-52
	Portage Lakes Sand & Gravel Co.	Portage Lakes Sand & Gravel Co.	Coventry	sand — building, road construction/resurfacing, other	St-53

¹This mine was operated 1st and 2nd quarters 1994 by Zink Petroleum Corp. dba State Route 416 Sand & Gravel and 3rd and 4th quarters 1994 by Northern Ohio Materials, Inc.

1994 OHIO DIRECTORY OF SAND AND GRAVEL MINING OPERATORS REPORTING SALES OR PRODUCTION, BY COUNTY — Continued

County	Name of operator	Name of pit	Township	Type and principal use	State mine number
Washington (cont.)	M & J Sand & Gravel, Inc.	Coprolite M & J Sand & Gravel, Inc. Plant #2	Muskingum Newport	sand — unspecified sand — unspecified	Wn-43 Wn-1010
	Muskingum River Gravel Co.		Grandview	sand — unspecified gravel — unspecified	Wn-38
	Trout Sand & Gravel Co.	Trout Sand & Gravel Co.	Warren	sand — building gravel — building	Wn-510
	Mark Williams Blacktop Co., Inc.	Williams Pit #2	Warren	sand — building, asphaltic concrete	Wn-1007
Wayne	Buckeye Excavating E. A. Construction, Inc.	Steiner Pit #1	Canaan Clinton	gravel — building sand — unspecified	We-23 We-24
	Prairie Lane Sand & Gravel Co.	Prairie Lane Sand & Gravel Co.	Franklin	sand — building, road construction/resurfacing	We-11
	Rupp Construction, Inc.	Rupp Construction, Inc.	Baughman	gravel — building sand — building, portland cement concrete, asphaltic concrete, road construction/resurfacing	We-7
	Zollinger Sand & Gravel Co.	Zollinger Sand & Gravel Co.	Chippewa	gravel — unspecified gravel — unspecified	We-15
Williams	Heer Excavating, Inc. Stonoco, Inc.	Mason Pit South Montpelier Thiel Construction Co.	Superior	gravel — building	Ws-22
	Thiel Construction Co.	Thiel Construction Co.	Superior	sand — portland cement concrete, asphaltic concrete, filtration	Ws-6
	Weber Sand & Gravel, Inc.	Weber Sand & Gravel, Inc.	St. Joseph	gravel — building sand — unspecified	Ws-21 Ws-11
	G. M. Sader Excavating & Paving, Inc.	G. M. Sader Excavating & Paving, Inc.	Plain	gravel — unspecified sand — fill gravel — fill	Wd-13
Wyandot	Kirby's Sand & Gravel, Inc.	Kirby's Sand & Gravel, Inc.	Eden	sand — building, road construction/resurfacing, filtration	Wt-17
	National Lime & Stone Co.	Kirby's Sand & Gravel, Inc.	Eden	gravel — building, road construction/resurfacing, filtration	Wt-K
	Precision Aggregate, Inc.	Upper Sandusky Plant	Eden	gravel — building, road construction/resurfacing, filtration sand — building, portland cement concrete	Wt-15 ¹⁰
		Precision Aggregate I	Crane, Eden	gravel — portland cement concrete sand — building, portland cement concrete, other gravel — building, portland cement concrete, other	Wt-4

¹⁰Information for Wt-15 includes information for Wt-18.

**1994 SANDSTONE/CONGLOMERATE COMPANIES WITH
SALES OR PRODUCTION**

Company	No. of operations	Sales (tons)	Production (tons)
Belden Brick Co.	1	4,000	4,000
Best Sand Corp.	2	700,315	814,389
Briar Hill Stone Co.	6	21,942	21,942
Oscar Brugmann Sand & Gravel, Inc.	1	53,006	78,000
Cleveland Quarries, L.P.	2	1,823	1,823
D. & D. Mining Co.	1	980	980
Gwin Contracting Co.	1	1,414	1,414
Keeney Sand & Stone, Inc.	1	70,749	70,749
Kimble Clay & Limestone Co.	1	86,575	86,575
L & M Mineral Co.	1	4,876	4,876
Mesenburg Bros., Inc.	1	19,988	19,988
Newbury Sand & Gravel	1	20,815	20,815
Oglebay Norton Industrial Sands, Inc.	2	512,419	512,419
Rash Energy, Inc.	1	47,407	47,407
Riverside Sand & Gravel Co., Inc.	1	2,503	2,503
Schrader Sand & Gravel	1 ¹	27,768	28,891
R. W. Sidley, Inc.	2	159,400	215,400
Slankard Dozer Service, Inc.	1	1,136	1,136
Southern Silica, Inc.	1	62,375	62,375
U.S. Silica Co.	1	6,626	6,626
Waller Bros. Stone Co.	2	5,900	5,900
Frank Widmor Coal Co., Inc.	1	7,404	7,404
TOTAL: 22 companies	31	1,819,421	2,015,612

¹This mine was operated November through December 1994 by Best Sand Corp. and is not included in the total number of mines.

1994 OHIO DIRECTORY OF SANDSTONE/CONGLOMERATE MINE OPERATORS REPORTING SALES OR PRODUCTION, BY COUNTY

For those mines for which the Division of Mines has not assigned a state mine number, a letter designation is used (example: Gea-N).

County	Name of operator	Name of quarry	Township	Geological unit	Type and principal use	State mine number
Belmont	Frank Widmor Coal Co., Inc.	Bellaire Stone	Pultney		crushed or broken stone — riprap	Bt-1190
Columbiana	D. & D. Mining Co.	D. & D. Mining Co.	Unity		crushed or broken stone — other	Ca-888
Coshocton	Briar Hill Stone Co.	Quarry #26	Monroe	Massillon (Pennsylvanian)	dimension stone — rough construction	Cn-13
		Quarry #32	Monroe	Massillon (Pennsylvanian)	dimension stone — rough construction	Cn-686
		Quarry #24	Monroe	Massillon (Pennsylvanian)	dimension stone — rough construction	Cn-692
		Quarry #55	Monroe	Massillon (Pennsylvanian)	dimension stone — rough construction	Cn-815
		Quarry #54	Monroe	Massillon (Pennsylvanian)	dimension stone — rough construction	Cn-809
		Quarry #3	Tiverton	Massillon (Pennsylvanian)	dimension stone — rough construction	Cn-659
Erie	Cleveland Quarries, L.P.	Birmingham Quarry	Florence	Berea (Mississippian)	dimension stone — rough construction, rough architectural, finished stone	Ee-21
Geauga	Best Sand Corp.	Best Sand Corp.	Munson	Sharon conglomerate (Pennsylvanian)	crushed or broken stone — foundry sand, glass sand, metallurgical pebble, refractory, aggregate, fire and furnace sand, polishing/grinding sand, engine sand, frac sand, construction, filtration, filler, extender, turf, landscape use, industrial sand	Gea-3
	Newbury Sand & Gravel	Newbury Sand & Gravel	Burton	Sharon conglomerate (Pennsylvanian)	crushed or broken stone — construction	Gea-N
	R. W. Sidley, Inc.	Hambden Quarry	Hambden	Sharon conglomerate (Pennsylvanian)	crushed or broken stone — construction	Gea-S
		Thompson Pit	Thompson	Sharon conglomerate (Pennsylvanian)	crushed or broken stone — metallurgical pebble, aggregate, engine sand, other	Gea-1
Huron	Mesenburg Bros., Inc.	Mesenburg Bros., Inc.	Townsend	Berea (Mississippian)	crushed or broken stone — riprap	Hrn-8
Knox	Oglebay Norton Industrial Sands, Inc.	Millwood Sand Plant	Union	Black Hand (Mississippian)	crushed or broken stone — foundry sand, glass sand, silica flour, engine sand, frac sand, other	Kx-1
Lake	Keeney Sand & Stone, Inc.	Keeney Sand & Stone, Inc.	Leroy	Berea (Mississippian)	crushed or broken stone — construction	Lke-K
Lorain	Cleveland Quarries, L.P.	Amherst Quarries	Amherst	Berea (Mississippian)	dimension stone — rough construction, rough architectural, finished stone	Ln-3
Mahoning	Gwin Contracting Co.	Gwin Contracting Co.	Milton	Sharon sandstone (Pennsylvanian)	crushed or broken stone — construction	Mg-62
Perry	Oglebay Norton Industrial Sands, Inc.	Glass Rock	Hopewell	Massillon (Pennsylvanian)	crushed or broken stone — fractured laminated sand rock	Py-344
Pike	Best Sand Corp.	Schrader Quarry	Jackson	Sharon conglomerate (Pennsylvanian)	crushed or broken stone — foundry sand, glass sand, silica flour, other	Pke-31 ¹
	Schrader Sand & Gravel	Schrader Sand & Gravel	Jackson	Sharon conglomerate (Pennsylvanian)	crushed or broken stone — foundry sand, glass sand, aggregate, industrial sand, turf, landscape use, filler, extender	Pke-31 ¹
Portage	Oscar Brugmann Sand & Gravel, Inc.	Oscar Brugmann Sand & Gravel, Inc.	Shalersville	Sharon conglomerate (Pennsylvanian)	crushed or broken stone — other	Pe-9
Ross	Southern Silica, Inc.	Southern Silica, Inc.	Jefferson	Sharon conglomerate (Pennsylvanian)	crushed or broken stone — foundry sand, glass sand, refractory, engine sand, construction, fill, filtration, grit, industrial sand	Rs-16
Scioto	Waller Bros. Stone Co.	Inskeep Quarry	Rush	Buena Vista (Mississippian)	dimension stone — rough construction	So-48
		Crabtree Quarry	Morgan, Rush, Union	Buena Vista (Mississippian)	dimension stone — rough construction	So-76
Summit	Riverside Sand & Gravel Co., Inc.	Riverside	Stow, Tallmadge		crushed or broken stone — riprap	St-24
					dimension stone — landscape use	
Tuscarawas	Belden Brick Co.	Wallick Pit	Franklin		crushed or broken stone — other	Ts-1841
	Kimble Clay & Limestone Co.	Kimble Clay & Limestone Co.	Dover		crushed or broken stone — riprap, construction	Ts-1818
	L & M Mineral Co.	Spring	Mill, Warwick		crushed or broken stone — riprap	Ts-1982
	Slankard Dozer Service, Inc.	Beach City Pit	Franklin		crushed or broken stone — other	Ts-2032
	U.S. Silica Co.	Coxey Works	Wayne		crushed or broken stone — fire and furnace sand	Ts-1660
Wayne	Rash Energy, Inc.	Rash Energy, Inc.	Paint	Massillon (Pennsylvanian)	crushed or broken stone — other	We-26

¹This mine was operated January through October 1994 by Schrader Sand & Gravel, and November through December 1994 by Best Sand Corp.

1994 CLAY COMPANIES WITH SALES OR PRODUCTION

Company	No. of operations	Sales (tons)	Production (tons)
American Landfill, Inc.	1	52,823	52,823
Athens Hocking Reclamation Center	1	2,324	2,324
Beaver Excavating, Inc.	1	80,000	80,000
Belden Brick Co.	5	261,361	261,361
Belville Mining Co., Inc.	1	5,658	5,658
Blue Jay Enterprises, Inc.	1	31,161	31,161
BRYCO	1	56,425	56,425
Buckeye-Industrial Mining Co.	1	1,581	1,581
Cedar Heights Clay Co.	3	64,893	64,893
Clark Clay Co.	1	3,528	1,710
Cochran Transportation Services, Inc.	1	2,987	2,987
D. & D. Mining Co.	1	16,597	16,597
Dennis Clay Co.	3	34,371	34,371
James E. Downard	1	165	165
R.A. Eberts Co., Inc.	1	529	529
John James Estes & Assoc., Inc.	1	20,000	20,000
David L. Florence	1	4,052	4,052
General Clay Products Corp.	2	28,294	28,294
Good Builders	1	154	154
Green Basin Coal, Inc.	1	56	56
Green Oaks Potting Products, Inc.	1	275	275
Holmes Limestone Co.	2	61,992	61,992
JTM Industries, Inc.	1	219,840	256,590
Kimble Clay & Limestone Co.	1	88,342	88,342
Koch Engineering Co., Inc.	1	1,556	1,556
L & M Mineral Co.	1	15,380	15,380
Lafarge Corp.	1	135,349	135,349
Loxley Aggregates, Inc.	1	680	680
Mitchell Transport, Inc.	1	3,328	3,328
Nutter Bros. Coal Co., Inc.	1	24,039	24,039
NuWay Services, Inc.	1	14,730	14,730
Rash Energy, Inc.	1	53,333	53,333
Red Brush Peat Co.	1	7,724	7,724
Sandkuhl Clay Works, Inc.	1	5,336	5,336
Seaway Sand & Stone, Inc.	1	8,072	8,072
Simak Trucking, Inc.	1	453	453
Solomon's Mines, Inc.	1	5,276	5,276
Soltis Sand & Gravel	1	562	562
Speer Brothers, Inc.	1	81,200	81,200
State Line Resources, Inc.	1	41,680	41,680
Stone Creek Brick Co.	1	36,666	36,666
Valley Clay Mining Co.	2	17,985	27,903
Valley Materials Co.	1	6,339	6,339
Waste Management of Ohio, Inc.	1	182,832	182,832
Waterloo Coal Co., Inc.	1	1,411	1,411
Weidle Sand & Gravel, Inc.	1	63,054	63,054
Brush Wellman, Inc.	1	90,000	90,000
Frank Widmor Coal Co., Inc.	1	197	197
Winfield Clay	1	1,100	1,100
TOTAL: 49 companies	60	1,835,690	1,880,540

1994 OHIO DIRECTORY OF CLAY-MINE OPERATORS REPORTING SALES OR PRODUCTION, BY COUNTY

For those mines for which the Division of Mines has not assigned a state mine number, a letter designation is used (example: Cn-B).

County	Name of operator	Name of mine or quarry	Township	Geological unit	Principal use	State mine number
Ashtabula	Simak Trucking, Inc.	Simak Trucking, Inc.	Kingsville		construction	Asa-18
Athens	Athens Hocking Reclamation Center	Athens Hocking Reclamation Center	York		oil and gas well plugging material	As-594
	Cochran Transportation Services, Inc.	Cochran Transportation Services, Inc.	Dover		other	As-595
	R.A. Eberts Co., Inc.	Diamond Stone	Lee		common clay products, other	As-533
Auglaize	Sandkuhl Clay Works, Inc.	Sandkuhl Clay Works, Inc.	Salem	Pleistocene glacial clay	common clay products, unspecified	Ae-7
Belmont	Frank Widmor Coal Co., Inc.	Bellaire Stone	Pultney		refractories	Bt-1190
Carroll	Buckeye-Industrial Mining Co.	Myers	Rose	No. 5 clay (Pennsylvanian)	refractories	Cl-238
Columbiana	D. & D. Mining Co.	D. & D. Strip	Unity		refractories	Ca-348
	State Line Resources, Inc.	State Line Resources, Inc.	Middleton	No. 5 & No. 6 clays (Pennsylvanian)	common clay products	Ca-505
	CONESVILLE	Conesville	Franklin	No. 6 clay (Pennsylvanian)	other	Cn-B
	Drescher Pit	Drescher Pit	Crawford	No. 5 clay (Pennsylvanian)	common clay products	Cn-787
Coshocton	General Clay Products Corp.	JTM Clay Mine	Franklin		construction	Cn-JTM
	Speer Brothers, Inc.	101 Location	Margaretta		unspecified	Ee-32
Erie	James E. Downard	James E. Downard	Rush Creek		unspecified	Fd-16
Fairfield	Soltis Sand & Gravel	Soltis Sand & Gravel	Parkman	No. 5 fire clay (Pennsylvanian)	unspecified	Gea-9
Geauga	General Clay Products Corp.	General Clay Products Corp.	Falls Gore		common clay products	Hg-205
Hocking	Good Builders	Good Builders	Green		construction	Hg-G
Holmes	Clark Clay Co.	Clark Clay Co.	Hardy	Putnam Hill (Pennsylvanian)	common clay products	Hs-56
	Holmes Limestone Co.	241 Plant	Hardy	Brookville & Putnam Hill (Pennsylvanian)	common clay products	Hs-67
Jackson	Cedar Heights Clay Co. (Div. of Resco Products, Inc.)	Cedarloo/Jenkins/Greer	Madison	No. 5 clay (Pennsylvanian)	common clay products	Jkn-1007
		Sadler	Jefferson		common clay products	Jkn-CH
		Waterloo-Zoar Quarry	Bloomfield, Madison	No. 5 & No. 6 clays (Pennsylvanian)	common clay products	Jkn-CH1
Lake	Waterloo Coal Co., Inc.	North Park Reclamation Clay Center	Painesville		unspecified	Jkn-367
Lawrence	Mitchell Transport, Inc.	Belville Mining Co. #1	Washington	Clarion & No. 5 clays (Pennsylvanian)	landfill use	Lke-M
	Belville Mining Co., Inc.				refractories	Le-B
Licking	NuWay Services, Inc.	NuWay Services, Inc.	Burlington		construction	Lg-N
Lucas	Seaway Sand & Stone, Inc.	Seaway Sand & Stone, Inc.	Swanton		construction, unspecified	Ls-13
Madison	Solomon's Mines, Inc.	Solomon's Mines, Inc.	Green		construction	Mg-632
Montgomery	Weidle Sand & Gravel, Inc.	Weidle Sand & Gravel, Inc.	Jefferson		common clay products	My-W
Muskingum	Dennis Clay Co.	Ohio Power	Newton		common clay products	Mum-903
	Valley Clay Mining Co.	Kimpel #2	Newton	Tionesta & Brookville clays (Pennsylvanian)	common clay products	Mum-904
Ottawa	Brush Wellman, Inc.	Brush Wellman Clay Mine	Harris		construction	Oa-19
Paulding	Lafarge Corp.	Paulding Quarry	Crane		cement manufacture	Pg-1
Perry	Dennis Clay Co.	Snake Hollow	Harrison	Detroit River & upper Dundee (Devonian)	common clay products	Py-DCC
		Nutter Bros. Coal Co., Inc.	Monday Creek	No. 5 clay (Pennsylvanian)	common clay products	Py-338
		Tague Mine	Monday Creek		common clay products	Py-N
Pike	John James Estes & Assoc., Inc.	John James Estes & Assoc., Inc.	Seal	No. 5 clay (Pennsylvanian)	common clay products	Py-V
	Valley Materials Co.	Valley Materials Co.	Scioto		construction	Pke-J
		Green Oaks	Franklin		unspecified	Pke-26
Portage	Green Oaks Potting Products, Inc.	Red Brush Peat Co.	Franklin		fill, soil mix	Pe-89
	Red Brush Peat Co.	Loxley Aggregates, Inc.	Twin	No. 5 & No. 6 clays (Pennsylvanian)	baseball diamond	Pe-61
Preble	Loxley Aggregates, Inc.	American Landfill, Inc.	Sandy		landfill use	Pre-9
Stark	Beaver Excavating, Inc.	Stone Products	Canton	Brookville (Pennsylvanian)	unspecified	Sk-246
	Holmes Limestone Co.	Bolivar Mine	Bethlehem	No. 5 clay (Pennsylvanian)	common clay products	Sk-BE
	Koch Engineering Co., Inc.	Koch Engineering Co., Inc.	Pike	No. 5 & No. 6 clays (Pennsylvanian)	vitrefied products	Sk-K
	Waste Management of Ohio, Inc.	Countywide RDF	Bethlehem, Pike	No. 5 & No. 6 clays (Pennsylvanian)	landfill use	Sk-217

Tuscarawas	Belden Brick Co.	Wallick Pit Moomaw Pit Belden Pit	Franklin, Wayne Sugar Creek Sugar Creek	Brookville (Pennsylvanian) Brookville (Pennsylvanian) Brookville & Lower Kittanning (Pennsylvanian)	common clay products common clay products common clay products	Ts-1841 Ts-1517 Ts-1646
	Blue Jay Enterprises, Inc.	Shanesville Pit Beagle Pit Swonger-Waltz Mine	Sugar Creek Sugar Creek Sandy	Brookville (Pennsylvanian) Brookville (Pennsylvanian)	common clay products common clay products common clay products, refractories	Ts-1939 Ts-1960 Ts-520
	Green Basin Coal, Inc. Kimble Clay & Limestone Co.	Blackhawk Kimble Clay & Limestone Co.	Lawrence Dover	Vanport (Pennsylvanian)	common clay products, refractories, construction	Ts-2024 Ts-1818
	L & M Mineral Co. Stone Creek Brick Co. Winfield Clay	Spring Stone Creek Clay Mine Winfield Clay	Mill, Warwick Jefferson Dover		refractories, construction common clay products vitrified products	Ts-1982 Ts-1557 Ts-2047
	David L. Florence Rash Energy, Inc.	David L. Florence Rash Energy, Inc.	Warren Paint	No. 6 clay (Pennsylvanian)	common clay products construction common clay products	Wn-F We-26
Washington Wayne						

1994 SHALE COMPANIES WITH SALES OR PRODUCTION

Company	No. of operations	Sales (tons)	Production (tons)
American Landfill, Inc.	1	316,967	316,967
Belden Brick Co.	4	272,342	272,342
Blue Jay Enterprises, Inc.	1	11,029	11,029
Bowerton Shale Co.	3	46,091	46,091
Buckeye-Industrial Mining Co.	1	7,524	7,524
Craigton Shale Co.	1	1,735	1,735
Dennis Clay Co.	2	13,906	13,906
Dome Minerals, Inc.	1	8,167	8,167
E.M.I. Corp., dba ESSROC Materials, Inc.	2	122,452	122,452
General Clay Products Corp.	4	41,791	41,791
Glen-Gery Corp.	1	152,681	152,681
Green Basin Coal, Inc.	1	130	130
Holmes Limestone Co.	1	2,402	2,402
Hydraulic Press Brick Co.	1	240,211	240,211
Board of Knox County Commissioners	1	3,648	3,648
L & M Mineral Co.	1	45,882	45,882
London Tile Co.	1	1,368	1,368
M & M Builders Supply Co.	1	28,000	28,000
Prairie Lane Sand & Gravel Co.	1	3,849	3,849
Rash Energy, Inc.	1	37,925	37,925
Richland Moulded Brick Co.	1	10,000	10,000
Stone Creek Brick Co.	1	6,648	6,648
Summitville Tiles, Inc.	1	39,550	39,550
Towne Square Products	1	275	280
Waste Management of Ohio, Inc.	1	1,650,279	1,650,279
Frank Widmor Coal Co., Inc. Zoar Mining Co.	1 1	67,785 3,092	67,785 3,092
TOTAL: 27 companies	37	3,135,729	3,135,734

1994 OHIO DIRECTORY OF SHALE-MINE OPERATORS REPORTING SALES OR PRODUCTION, BY COUNTY

For those mines for which the Division of Mines has not assigned a state mine number, a letter designation is used (example: Kx-K).

County	Name of operator	Name of mine	Township	Geological unit	Principal use	State mine number
Ashland	London Tile Co.	Biglow	Ruggles	Bedford (Mississippian)	common clay products	Ald-1
Belmont	Frank Widmor Coal Co., Inc.	Bellaire Stone	Pulney		construction	Bt-1190
Columbiana	Buckeye-Industrial Mining Co. Dome Minerals, Inc. M & M Builders Supply Co. Summitville Tiles, Inc.	West Point Dome Minerals, Inc. M & M Builders Supply Co. Summitville Tiles, Inc.	Madison Franklin Unity Franklin		construction common clay products, paving other common clay products	Ca-987 Ca-947 Ca-970 Ca-205
Coshocton	General Clay Products Corp.	Drescher Pit	Crawford	Lower Kittanning (Pennsylvanian)	common clay products	Cn-787
Cuyahoga	Hydraulic Press Brick Co.	Hydraulic Press Brick Co.	City of Independence	Chagrin (Devonian)	lightweight aggregate	Cya-19
Harrison	Bowerston Shale Co.	Bowerston	Monroe	Conemaugh (Pennsylvanian)	vitrified products	Hn-152
Hocking	General Clay Products Corp.	General Clay Products Corp. General Clay Products Corp.	Falls Gore Starr	No. 5 fire clay (Pennsylvanian)	common clay products common clay products	Hg-205 Hg-330
Holmes	Holmes Limestone Co.	241 Plant	Hardy	Brookville & Vaport (Pennsylvanian)	common clay products	HS-67
Knox	Board of Knox County Commissioners	Board of Knox County Commissioners	Brown		construction	Kx-K
Licking	Bowerston Shale Co.	Hanover	Hanover	Logan (Mississippian)	vitrified products	Lg-501
Mahoning	E.M.A.I. Corp., dba ESSROC Materials, Inc.	Bessemer Pit	Poland	Vanport (Pennsylvanian)	cement manufacture	Mg-608
		Carbon Pit	Poland, Springfield		cement manufacture	Mg-EM
Marion	Glen-Gery Corp.	Glen-Gery Corp.	Tully	Bedford (Mississippian)	common clay products	Mn-7
Medina	General Clay Products Corp.	General Clay Products Corp.	Wadsworth		common clay products	Ma-6
Muskingum	Bowerston Shale Co. Dennis Clay Co.	Frazesburg Ohio Power	Jackson Newton	Flint Ridge & Middle Mercer (Pennsylvanian)	vitrified products common clay products	Mum-776 Mum-903
Noble	Towne Square Products	Towne Square Products	Buffalo		common clay products	Ne-66
Perry	Dennis Clay Co.	Dennis Clay Co.	Monday Creek		common clay products	Py-338
Richland	Richland Moulded Brick Co.	Richland Moulded Brick Co.	Franklin, Weller	Bedford (Mississippian)	common clay products	Rd-R
Stark	American Landfill, Inc. Waste Management of Ohio, Inc.	American Landfill, Inc. Countywide RDF	Sandy Bethlehem, Pike	Lower & Middle Kittanning (Pennsylvanian) Lower & Middle Kittanning (Pennsylvanian)	landfill use landfill use	Sk-246 Sk-217
Tuscarawas	Belden Brick Co.	Wallick Pit Moomaw Pit Belden Pit Shanesville Pit Swonger-Waltz Mine Blackhawk Rainsberg Stone Creek Shale Pit Zoar Mining Co.	Franklin, Wayne Sugar Creek Sugar Creek Sugar Creek Sandy Lawrence Rush Jefferson Sandy	Brookville (Pennsylvanian) Brookville & Tionesta (Pennsylvanian) Brookville & Tionesta (Pennsylvanian) Brookville (Pennsylvanian)	common clay products common clay products common clay products common clay products common clay products common clay products vitrified products other	Ts-1841 Ts-1517 Ts-1646 Ts-1939 Ts-520 Ts-2024 Ts-H1 Ts-1558 Ts-540
Wayne	Craigton Shale Co. Prairie Lane Sand & Gravel Co. Rash Energy, Inc.	Craigton Shale Co. Prairie Lane Sand & Gravel Co. Rash Energy, Inc.	Clinton Franklin Paint	Middle Kittanning (Pennsylvanian)	construction construction, unspecified common clay products	We-25 We-11 We-26

**1994 OHIO DIRECTORY OF SALT-MINE AND SALT-BRINING-PLANT OPERATORS
REPORTING SALES OR PRODUCTION, BY COUNTY**

County	Name of operator	Name of mine	Township	Geological unit and product	State mine number
Cuyahoga	Akzo Nobel Salt, Inc.	Cleveland Mine	City of Cleveland	Salina (Silurian) — rock salt	Cya-30
Lake	Morton International, Inc. Morton Salt Div.	Fairport Mine	Painesville	Salina (Silurian) — rock salt	Lke-6
Licking	R. H. Penick Co.	R. H. Penick Co.	Newark	"Newburg" (Silurian) — natural brine	Lg-45
Summit	Akzo Nobel Salt, Inc.	Akzo Nobel Salt, Inc.	Coventry	Salina (Silurian) — artificial brine	St-9127
Wayne	Morton International, Inc., Morton Salt Div.	Morton Salt Well Field	Milton	Salina (Silurian) — artificial brine	We-9129

1994 OHIO DIRECTORY OF GYPSUM-MINE OPERATORS REPORTING SALES OR PRODUCTION

County	Name of operator	Name of mine	Township	Geological unit	State mine number
Ottawa	Celotex Corp.	American #2	Portage	Silurian	Oa-2

1994 OHIO DIRECTORY OF PEAT-MINE OPERATORS REPORTING SALES OR PRODUCTION, BY COUNTY

County	Name of operator	Name of mine	Township	Type and principal use	State mine number
Champaign	Sphagnum Moss Peat Farm	Sphagnum Moss Peat Farm	Harrison	mulch, humus — worm culture	Cpn-9
Portage	Green Oaks Potting Products, Inc. Red Brush Peat Co.	Green Oaks Red Brush Peat Co.	Franklin Franklin	mulch, soil mix soil mix	Pe-89 Pe-61
Williams	Lingvai Peat Co.	Lingvai Peat Co.	Center	mulch	Ws-17

**NUMERICAL INDEX OF OPERATORS OF MINES
SHOWN ON 1994 MINERAL INDUSTRIES MAP OF OHIO, BY COMMODITY**

COAL ● ○

<i>Map location number</i>	<i>County</i>	<i>State mine number</i>	<i>Division of Reclamation permit number</i>	<i>Name of operator</i>
3	Belmont	Bt-68	D-0360	Ohio Valley Coal Co.
19	Belmont	Bt-927	D-0483	Fairpoint Coal Co.
27	Belmont	Bt-1074	D-0340	Ohio River Collieries, Inc.
38	Belmont	Bt-1104	D-0088	Marietta Coal Co.
39	Belmont	Bt-1105	D-0333	Marietta Coal Co.
42	Belmont	Bt-1109	D-0270	Marietta Coal Co.
58	Belmont	Bt-1129	D-0491	Marietta Coal Co.
144	Harrison	Hn-738	D-0376	W. B. Coal Co., Inc.
146	Harrison	Hn-217	D-0440	Varkony Mining Co.
150	Harrison	Hn-700	D-0826 et al.	Consolidation Coal Co.
161	Holmes	Hs-67	IM-3, IM-768	Holmes Limestone Co.
165	Jackson	Jkn-367	D-0205 et al.	Waterloo Coal Co., Inc.
178	Jefferson	Jfn-528	D-0247, D-0563, D-0803, D-0873	Boich Mining Co.
180	Jefferson	Jfn-687	D-0404, D-0939	Weirton Construction Co.
181	Jefferson	Jfn-831	D-0843	Penn Eagle Coal Corp.
185	Jefferson	Jfn-780	D-0126	D & L Contractors, Inc.
186	Jefferson	Jfn-784	D-0091, D-0728	F. & M. Coal Co.
189	Jefferson	Jfn-788	D-0983	Black Stone Mining Co.
190	Jefferson	Jfn-789	D-0307	Anthony Mining Co., Inc.
205	Mahoning	Mg-65	D-0374	Thompson Bros. Mining Co.
212	Meigs, Vinton	Ms-293	D-0354, D-0463	Southern Ohio Coal Co.
213	Meigs	Ms-294	D-0355	Southern Ohio Coal Co.
215	Monroe	Me-4	D-0433	Quarto Mining Co. (Subsidiary of Consolidation Coal Co.)
228	Morgan, Muskingum, Noble	Ne-41	D-0839 et al.	Central Ohio Coal Co.
239	Perry	Py-317	D-0057 et al.	Crooksville Coal Co., Inc.
246	Stark	Sk-208	D-0295, D-0827, D-1005, D-1015	ENZ, Inc.
248	Stark	Sk-217	D-0938, IM-750	Waste Management of Ohio, Inc.
256	Tuscarawas	Ts-115	D-0190 et al.	Costain Coal, Inc.
261	Tuscarawas	Ts-1646	IM-44	Belden Brick Co.
262	Tuscarawas	Ts-1727	IM-9	Kimble Clay & Limestone Co.
267	Tuscarawas	Ts-1914	D-0701	L & M Mineral Co.
300	Meigs, Vinton	Ms-293	D-0354, D-0463	Southern Ohio Coal Co.
314	Belmont, Guernsey	Gy-304	D-0262	R & F Coal Co.
326	Harrison	Hn-222	D-0587	Schiappa Coal Co., Inc.
357	Vinton	Vn-172	D-0445	Benedict, Inc.
363	Stark	Sk-235	IM-945, D-0865	Holmes Limestone Co.
391	Belmont	Bt-948	D-0348	R & F Coal Co.
401	Jefferson	Jfn-807	D-0642	Valley Mining, Inc.
411	Tuscarawas	Ts-1982	IM-621	L & M Mineral Co.
418	Vinton	Vn-182	D-0631	R. A. Eberts Co., Inc.
419	Vinton	Vn-183	D-0633	Benedict, Inc.
420	Vinton	Vn-184	D-0609	Benedict, Inc.
423	Vinton	Vn-187	D-0672	Benedict, Inc.
424	Belmont	Bt-1150	D-0597	Marietta Coal Co.
433	Tuscarawas	Ts-1991	D-0702	Daron Coal Co., Inc.
441	Columbiana	Ca-348	IM-976, D-1002	D. & D. Mining Co.
452	Belmont	Bt-1164	D-0742	Marietta Coal Co.
456	Belmont	Bt-1168	D-0619	R & F Coal Co.
474	Columbiana	Ca-965	D-0591	Buckeye-Industrial Mining Co.
489	Jefferson	Jfn-813	D-0740	Valley Mining, Inc.
491	Lawrence	Le-B	IM-1188, D-0746	Belville Mining Co., Inc.
493	Noble	Ne-1008	D-0706	B & N Coal, Inc.
495	Noble	Ne-150	D-0787	B & N Coal, Inc.
510	Tuscarawas	Ts-2007	D-0737	Red Malcuit, Inc.
513	Vinton	Vn-S	D-0793	Sands Hill Coal Co., Inc.
514	Noble	Ne-151	D-0807	B & N Coal, Inc.
519	Belmont	Bt-1179	D-0840	K.C.C.I.
522	Belmont	Bt-1182	D-0854	R & F Coal Co.
523	Belmont	Bt-1183	D-0845	Marietta Coal Co.
524	Belmont	Bt-1184	D-0799	Joyce Coal Co., Inc.
528	Columbiana	Ca-985	D-0821	Double "R" Mining
529	Columbiana	Ca-349, Ca-978, Ca-994	D-0874	Buckeye-Industrial Mining Co.

**NUMERICAL INDEX OF OPERATORS OF MINES
SHOWN ON 1994 MINERAL INDUSTRIES MAP OF OHIO, BY COMMODITY – Continued**

COAL – Continued

<i>Map location number</i>	<i>County</i>	<i>State mine number</i>	<i>Division of Reclamation permit number</i>	<i>Name of operator</i>
532	Coshocton	Cn-PA	D-0850	R & F Coal Co.
534	Guernsey	Gy-310	D-1065	Costain Coal, Inc.
537	Harrison	Hn-MN	D-0772	R & F Coal Co.
538	Holmes	Hs-97	D-0775, D-0885, D-1039	Holmes Limestone Co.
541	Jackson, Vinton	Jkn-SH	D-0861, IM-1068	Sands Hill Coal Co., Inc.
555	Tuscarawas	Ts-2005	D-0769	Valley Mining, Inc.
556	Tuscarawas	Ts-2006	D-0800	Red Malcuit, Inc.
559	Tuscarawas	Ts-2010	D-0849	Miller Mining, Inc.
564	Jackson, Vinton	Vn-192	D-0207, D-1016	R. A. Eberts Co., Inc.
568	Belmont	Bt-1188	D-0908	R & F Coal Co.
570	Belmont	Bt-771	D-0771	Marietta Coal Co.
577	Coshocton	Cn-RF	D-0689	R & F Coal Co.
580	Harrison	Hn-710	D-0426	Harrison Mining Corp.
581	Harrison	Hn-748	D-0797	R & F Coal Co.
582	Harrison	Hn-750	D-0901	Valley Mining, Inc.
598	Tuscarawas	Ts-2019	D-0852	Kimble Clay & Limestone Co.
600	Tuscarawas	Ts-2022	D-0878	Kimble Clay & Limestone Co.
601	Tuscarawas	Ts-2023	D-0796	Holmes Limestone Co.
602	Vinton	Vn-191	D-0197, D-0867, D-0957, D-1004	Addington, Inc.
603	Belmont	Bt-1190	IM-1089, D-1061	Frank Widmor Coal Co.
604	Belmont	Bt-AT	D-0922	Marietta Coal Co.
616	Coshocton	Cn-OX	D-0964	Oxford Mining Co., Inc.
618	Guernsey	Gy-313	D-0907	R. T. G., Inc.
623	Jackson	Jkn-1069	D-0944	Sands Hill Coal Co., Inc.
626	Noble	Ne-154	D-0900	B & N Coal, Inc.
627	Noble	Ne-155	D-0958	B & N Coal, Inc.
629	Perry	Py-B	D-0940	Buckingham Mining & Reclamation, Inc.
631	Stark	Sk-246	IM-1114, D-1090	American Landfill, Inc.
634	Tuscarawas	Ts-1939	IM-47	Belden Brick Co.
635	Tuscarawas	Ts-2027	D-0948	Miller Mining, Inc.
636	Tuscarawas	Ts-2040	D-0935	Toronto A & L Coal, Inc.
637	Tuscarawas	Ts-GC	D-0962, D-0967	Miller Mining, Inc.
638	Tuscarawas	Ts-2037	D-0921	Kimble Clay & Limestone Co.
646	Columbiana	Ca-986	D-0975	C & E Coal, Inc.
647	Columbiana	Ca-991	D-0928	Buckeye-Industrial Mining Co.
648	Guernsey	Gy-315	D-0951	Northshore Coal, Inc.
649	Guernsey	Gy-C	D-0910	C L A Coal Co.
651	Jackson	Jkn-1066	D-0808	Sands Hill Coal Co., Inc.
652	Jackson	Jkn-1070	D-0997, et al.	Stewart Coal Co.
656	Jefferson	Jfn-821	D-0937	Joyce Coal Co., Inc.
657	Jefferson	Jfn-823	D-0949	Sterling Mining Co.
658	Jefferson	Jfn-824	D-0564	R & F Coal Co.
659	Jefferson	Jfn-PE	IM-1162	Penn Eagle Coal Corp.
660	Mahoning	Mg-632	IM-808	Solomon's Mines, Inc.
663	Perry	Py-A	D-0931	Avis Coal Co.
665	Perry	Py-BMR	D-0980, D-1014, D-1050	Buckingham Mining & Reclamation, Inc.
666	Stark	Sk-249	D-0960	Buckingham Mining & Reclamation, Inc.
667	Tuscarawas	Ts-1517	IM-46	Belden Brick Co.
668	Tuscarawas	Ts-2024	IM-1087	Green Basin Coal, Inc.
669	Tuscarawas	Ts-2034	D-0516	Valley Mining, Inc.
670	Tuscarawas	Ts-2045	D-1001	Holmes Limestone Co.
671	Tuscarawas	Ts-DC	D-0954	Daron Coal Co., Inc.
673	Tuscarawas	Ts-2038	D-0965	Holmes Limestone Co.
674	Tuscarawas	Ts-HLC	D-0969	Holmes Limestone Co.
675	Vinton	Vn-194	D-0973	Elk Coal, Inc.
676	Wayne	We-26	IM-690, IM-1210	Rash Energy, Inc.
680	Tuscarawas	Ts-HC	D-0981	Holmes Limestone Co.
681	Belmont	Bt-1201	D-1020	Cravat Coal Co.
682	Belmont	Bt-1202	D-0483	Cravat Coal Co.
684	Belmont	Bt-M	D-1009	R & F Coal Co.
686	Carroll	Cl-HM1	D-1035	Myers Mining
687	Columbiana	Ca-BI	D-0994	Buckeye-Industrial Mining Co.

NUMERICAL INDEX OF OPERATORS OF MINES
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COAL – Continued

<i>Map location number</i>	<i>County</i>	<i>State mine number</i>	<i>Division of Reclamation permit number</i>	<i>Name of operator</i>
688	Columbiana	Ca-CM	D-0950, D-0999	Commercial Minerals
689	Columbiana	Ca-JG	D-1008	John Glenn Mining Co.
691	Coshocton	Cn-P	D-1027	R & F Coal Co.
692	Coshocton	Cn-RF1	D-1012	R & F Coal Co.
693	Coshocton	Cn-RF2	D-0691	R & F Coal Co.
695	Coshocton	Cn-841	D-1033	R & R Minerals, Inc.
696	Guernsey	Gy-318	D-1025	Valley Mining, Inc.
697	Guernsey	Gy-319	D-0989	R.T.G., Inc.
699	Harrison	Hn-754	D-0829	R & F Coal Co.
701	Harrison	Hn-756	D-1045	W. B. Coal Co., Inc.
704	Holmes	Hs-525	D-1044	Miller Mining, Inc.
705	Jackson	Jkn-1007	IM-24, D-0813	Cedar Heights Clay Co.
706	Jackson	Jkn-CH	IM-1060	Cedar Heights Clay Co.
708	Jefferson	Jfn-829	D-1006	D & L Contractors, Inc.
711	Jefferson	Jfn-J	D-0995	R & F Coal Co.
712	Jefferson	Jfn-SD	D-0677	S. & D. Construction Corp.
714	Jefferson	Jfn-833	D-1049	Valley Mining, Inc.
716	Muskingum	Mum-O	D-1030	Oxford Mining Co., Inc.
717	Perry	Py-JC	D-1048	J.C. Coal Co., Inc.
719	Stark	Sk-HLC	D-0987, D-1053	Holmes Limestone Co.
720	Tuscarawas	Ts-1841	IM-45	Belden Brick Co.
721	Tuscarawas	Ts-2035	D-1010	Miller Mining, Inc.
723	Tuscarawas	Ts-2043	D-1047	R & F Coal Co.
725	Tuscarawas	Ts-2039	D-1023	Miller Mining, Inc.
727	Belmont	Bt-CCC	D-1080	Cravat Coal Co.
728	Belmont	Bt-K	D-1052	K.C.C.I.
729	Belmont	Bt-M1	D-1036	Marietta Coal Co.
730	Belmont	Bt-M2	D-1029	Marietta Coal Co.
731	Belmont	Bt-RF2	D-1062	R & F Coal Co.
732	Belmont	Bt-VM	D-1059	Valley Mining, Inc.
733	Carroll, Columbiana	Ca-1000	D-1055	Buckeye-Industrial Mining Co.
734	Carroll	Cl-514	D-1081	Miller Mining, Inc.
735	Columbiana	Ca-350	D-1078	Oldtown Coal Co.
736	Columbiana	Ca-997	D-1051	Commercial Minerals, Inc.
737	Columbiana	Ca-998	D-1068	Commercial Minerals, Inc.
738	Columbiana	Ca-999	D-1074	Buckeye-Industrial Mining Co.
739	Columbiana	Ca-MC	D-1069	Mardis Coal Co.
740	Coshocton	Cn-H1	D-1094	Holmes Limestone Co.
741	Coshocton	Cn-OX1	D-1064	Oxford Mining Co., Inc.
742	Coshocton	Cn-RF3	D-1071	R & F Coal Co.
743	Coshocton	Cn-WL	D-1060	R & F Coal Co.
744	Guernsey	Gy-324	D-0748	Northshore Coal, Inc.
745	Guernsey	Gy-327	D-1088	Holmes Limestone Co.
746	Harrison	Hn-757	D-1054	Myers Mining
747	Harrison	Hn-758	D-1058	Sunnydale Mining
748	Harrison	Hn-759	D-1037	Melvin Schaney
749	Harrison	Hn-761	D-1082, D-1097	Sunnydale Mining
750	Harrison	Hn-RF1	D-1076	R & F Coal Co.
751	Harrison	Hn-WB	D-1046	W.B. Coal Co., Inc.
752	Holmes	Hs-524	D-1072	Miller Mining, Inc.
753	Holmes	Hs-HLC1	D-1092	Holmes Limestone Co.
754	Jackson	Jkn-CH1	IM-1182	Cedar Heights Clay Co.
755	Jackson	Jkn-S1	D-1031	Sands Hill Coal Co., Inc.
756	Jefferson	Jfn-A	D-1063	Anthony Mining Co., Inc.
757	Jefferson	Jfn-JC	D-1067	Joyce Coal Co., Inc.
758	Jefferson	Jfn-ST	D-1019	Sterling Mining Co.
759	Lawrence	Le-BM	D-1057, D-1073	Belville Mining Co., Inc.
760	Noble	Ne-BN	D-1038	B & N Coal, Inc.
761	Noble	Ne-BN1	D-1032	B & N Coal, Inc.
762	Perry	Py-BM1	D-1089	Buckingham Mining & Reclamation, Inc.
763	Perry	Py-BM2	D-1093	Buckingham Mining & Reclamation, Inc.
764	Perry	Py-O	D-1086	Oxford Mining Co., Inc.
765	Tuscarawas	Ts-2047	IM-1224	Winfield Clay

**NUMERICAL INDEX OF OPERATORS OF MINES
SHOWN ON 1994 MINERAL INDUSTRIES MAP OF OHIO, BY COMMODITY — Continued**

COAL — Continued

<i>Map location number</i>	<i>County</i>	<i>State mine number</i>	<i>Division of Reclamation permit number</i>	<i>Name of operator</i>
766	Tuscarawas	Ts-DCC	IM-1075	Daron Coal Co., Inc.
767	Tuscarawas	Ts-MM2	D-1077	Miller Mining, Inc.
768	Tuscarawas	Ts-MM3	D-1085	Miller Mining, Inc.

COAL-PREPARATION PLANTS ●

<i>Map location number</i>	<i>County</i>	<i>State mine number</i>	<i>Division of Reclamation permit number</i>	<i>Name of operator</i>
3	Belmont	Bt-936	D-0216	Marietta Coal Co.
4	Belmont	Bt-68	D-0360	Ohio Valley Coal Co.
5	Columbiana	Ca-879	D-0806	Buckeye-Industrial Mining Co.
6	Columbiana	Ca-892	D-0599	C & E Coal, Inc.
7	Coshocton	Cn-810		Conesville Coal Preparation Co.
8	Harrison	Hn-212	D-0192	Consolidation Coal Co.
9	Jackson	Jkn-1055	D-0347	Sands Hill Coal Co., Inc.
10	Jackson	Jkn-367	D-0285	Waterloo Coal Co., Inc.
12	Jefferson	Jfn-647	D-0492	Ohio Coal & Construction Corp.
13	Mahoning	Mg-623	D-0214	East Fairfield Coal Co.
14	Meigs	Ms-293	D-0354	Southern Ohio Coal Co.
15	Monroe	Me-4	D-0422	Quarto Mining Co. (subsidiary of Consolidation Coal Co.)
16	Morgan	Ne-41	D-0420	Central Ohio Coal Co.
18	Perry	Py-317	D-0248	Crooksville Coal Co., Inc.
19	Tuscarawas	Ts-115	D-0199	Empire Coal Co.
20	Tuscarawas	Ts-1938	D-0264	Central Fuel Co.
21	Tuscarawas	Ts-1942	D-0287	Horizon Coal Corp.
22	Vinton	Vn-145	D-0159	Benedict, Inc.
23	Vinton	Vn-178	D-0185	Addington, Inc.
24	Vinton	Vn-641	D-0169	Sands Hill Coal Co., Inc.
27	Wayne	Hs-79	D-0283	Holmes Limestone Co.
28	Muskingum	Mum-239	D-0428	Sands Mining Corp.
29	Columbiana	Ca-932	D-0532	Buckeye-Industrial Mining Co.
30	Harrison	Hn-169	D-0424	Harrison Processing Corp.
32	Tuscarawas	Ts-HC	D-0981	Horizon Coal Corp.
33	Columbiana	Ca-505	D-0223	State Line Resources, Inc.
34	Guernsey	Gy-320		Thompson Mining Co.

Limestone/dolomite operators index begins on p. 128

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LIMESTONE/DOLOMITE ■

<i>Map location number</i>	<i>County</i>	<i>State mine number</i>	<i>Division of Reclamation permit number</i>	<i>Name of operator</i>
1	Adams	Ads-1	IM-237	Davon, Inc.
3	Allen	An-1	IM-485	Bluffton Stone Co.
5	Allen	An-3	IM-484	National Lime & Stone Co.
7	Allen	An-4	IM-491	Suever Stone Co., Inc.
9	Athens	As-533	IM-17	R.A. Eberts Co., Inc.
10	Auglaize	Ae-31	IM-744	Con-Ag, Inc.
11	Auglaize	Ae-10	IM-486	National Lime & Stone Co.
12	Belmont	Bt-716	IM-1	Ayers Limestone Quarry, Inc.
15	Carroll	Cl-183	IM-7	Puskarich Limestone, Inc.
16	Clark	Ck-1	IM-373	American Aggregates Corp.
17	Clinton	Cln-1	IM-241	Melvin Stone Co.
18	Crawford	Cd-1	IM-404	National Lime & Stone Co.
19	Darke	Dke-1	IM-362	American Aggregates Corp.
20	Delaware	Del-4	IM-262	American Aggregates Corp.
21	Delaware	Del-5	IM-207	National Lime & Stone Co.
22	Delware	Del-3	IM-327	American Aggregates Corp.
23	Delaware	Del-2	IM-299	Penry Stone Co.
24	Erie	Ee-27	IM-608	Erie Blacktop, Inc.
25	Erie	Ee-11	IM-263	Rogers Group, Inc. (dba Sandusky Crushed Stone Co.)
26	Erie	Ee-1	IM-310	Wagner Quarries Co.
27	Fayette	Fe-2	IM-169	American Aggregates Corp.
28	Fayette	Fe-1	IM-831	Melvin Stone Co.
29	Fayette	Fe-3	IM-329	American Aggregates Corp.
30	Franklin	Fn-2	IM-261	American Aggregates Corp.
31	Franklin	Fn-53	IM-185	American Aggregates Corp.
32	Greene	Ge-17	IM-435	American Aggregates Corp.
33	Clark, Greene	Ge-1	IM-393	Southwestern Portland Cement Co.
34	Greene	Ge-9	IM-364	Southwestern Portland Cement Co.
38	Hardin	Hdn-2	IM-443	Hardin Quarry Co., Inc.
41	Highland	Hd-2	IM-230	Davon, Inc.
42	Highland	Hd-3	IM-253	Ohio Asphaltic Limestone Corp.
43	Highland	Hd-4	IM-406	Marshall Quarry, Inc.
44	Holmes	Hs-67	IM-768	Holmes Limestone Co.
45	Holmes, Wayne	Hs-79	IM-656	Holmes Limestone Co.
47	Jackson	Jkn-367	IM-774	Waterloo Coal Co., Inc.
49	Logan	Lgn-1	IM-574	American Aggregates Corp.
50	Logan	Lgn-15	IM-453	C. E. Duff & Son, Inc.
51	Logan	Lgn-2	IM-494	Northwood Stone & Asphalt Co.
52	Lucas	Ls-1	IM-575	The France Stone Co.
53	Lucas	Ls-3	IM-580	The France Stone Co.
54	Lucas	Ls-2	IM-503	Stoneco, Inc.
56	Mahoning	Mg-54	IM-93	Honey Creek Stone Co.
57	Mahoning	Mg-608	IM-4	E.M.A.I. Corp.
59	Marion	Mn-2	IM-423	J. M. Hamilton & Sons Co., Inc.
60	Marion	Mn-3	IM-168	National Lime & Stone Co.
61	Marion	Mn-1	IM-250	Tri-County Limestone Co.
62	Mercer	Mr-1	IM-592	Stoneco, Inc.
63	Mercer	Mr-2	IM-430	Morrow Gravel Co.
64	Miami	Mi-1	IM-382	Piqua Materials, Inc.
66	Miami	Mi-502	IM-414	Barrett Paving Materials, Inc.
67	Miami	Mi-10	IM-335	C. F. Poeppelman, Inc.
70	Montgomery	My-1	IM-374	American Aggregates Corp.
71	Montgomery	My-23	IM-368	American Aggregates Corp.
72	Montgomery	My-58	IM-330	Southwestern Portland Cement Co.
73	Morgan	Mon-600	D-1034	Central Ohio Coal Co.
75	Muskingum	Mum-106	IM-297	Chesterhill Stone Co.
78	Muskingum	Mum-104	IM-277	Sidwell Bros., Inc.
80	Noble	Ne-86	IM-70	Zerger's Quarry
82	Ottawa	Oa-6	IM-296	White Rock Quarry, L.P., Division of U.S. Aggregates, Inc.
83	Ottawa	Oa-14	IM-320	Stoneco, Inc.
84	Ottawa	Oa-7	IM-440	Standard Lafarge
85	Ottawa	Oa-1	IM-292	GenLime Group, L.P.
86	Paulding	Pg-7		The France Stone Co.

**NUMERICAL INDEX OF OPERATORS OF MINES
SHOWN ON 1994 MINERAL INDUSTRIES MAP OF OHIO, BY COMMODITY – Continued**

LIMESTONE/DOLOMITE – Continued

<i>Map location number</i>	<i>County</i>	<i>State mine number</i>	<i>Division of Reclamation permit number</i>	<i>Name of operator</i>
87	Paulding	Pg-1	IM-513	Lafarge Corp.
88	Paulding	Pg-2	IM-481	Stoneco, Inc.
89	Perry	Py-235	IM-11, IM-515	Maxville Quarries, Inc.
91	Pike	Pke-13	IM-213	Latham Limestone, Inc.
92	Pickaway	Pky-4	IM-209	Melvin Stone Co.
95	Preble	Pre-5	IM-447	Wysong Stone Co.
98	Putnam	Pm-2	IM-570	Putnam Stone Co.
101	Sandusky	Sy-5	IM-259	Gotttron Bros. Co.
102	Sandusky	Sy-1	IM-537	Martin Marietta Magnesia Specialties, Inc.
103	Sandusky	Sy-4	IM-381	Redland Ohio, Inc.
104	Sandusky	Sy-3	IM-282	Redland Ohio, Inc.
106	Seneca	Sa-2	IM-352	Premier Services Corp.
107	Seneca	Sa-1	IM-347	The France Stone Co.
108	Seneca	Sa-3	IM-349	The France Stone Co.
109	Seneca	Sa-8	IM-313	North Shore Stone Quarries, Inc.
110	Shelby	Shy-6	IM-389	Miami River Stone Co.
111	Shelby	Shy-16	IM-411	Sidney Sand & Gravel Co.
112	Shelby	Shy-15	IM-387	Spring Creek Corp.
117	Tuscarawas	Ts-1818	IM-9	Kimble Clay & Limestone Co.
119	Union	Un-1	IM-208	Northwood Stone & Asphalt Co.
120	Union	Un-2	IM-236	Union Aggregates Co.
121	Van Wert	Vt-3	IM-495	Stoneco, Inc.
122	Van Wert	Vt-7	IM-642	Ridge Township Quarry
123	Van Wert	Vt-1	IM-500	Suever Stone Co., Inc.
124	Vinton	Vn-174	D-0309	G & M Supply, Inc. (dba Clinton Stone, Inc.)
129	Wood	Wd-5	IM-473	The France Stone Co.
130	Wood	Wd-1	IM-548	MacRitchie Materials, Inc.
131	Wood	Wd-6	IM-480	Stoneco, Inc.
132	Wood	Wd-11	IM-475	Stoneco, Inc.
133	Wyandot	Wt-3	IM-298	McCarthy Stone Quarry
134	Wyandot	Wt-1	IM-405	National Lime & Stone Co.
135	Wyandot	Wt-8	IM-273	Wyandot Dolomite, Inc.
142	Greene	Ge-25	IM-437	American Aggregates Corp.
143	Montgomery	My-32	IM-1012	American Aggregates Corp.
144	Muskingum	Mum-269	IM-1009	Salt Creek Materials, Inc.
146	Coshocton	Cn-830	IM-1049	Sidwell Bros., Inc.
147	Guernsey, Muskingum	Gy-309	IM-1030	King Limestone, Inc.
148	Vinton	Vn-190	D-0761	Quality Stone Co.
149	Hancock	Hk-7	IM-1002	National Lime & Stone Co.
151	Belmont	Bt-1192	IM-1093	Black Gold Recovery, Inc.
152	Belmont	Bt-1190	IM-1089	Frank Widmor Coal Co., Inc.
153	Coshocton	Cn-A	IM-1011	Jim Romig Excavating
154	Franklin	Fn-43	IM-188	Olen Corp.
155	Greene	Ge-45	IM-364	American Aggregates Corp.
156	Hardin	Hdn-S	IM-1034	C. E. Duff & Son, Inc.
158	Jackson	Jkn-SH	IM-1068	Sands Hill Coal Co., Inc.
159	Lawrence	Le-B	IM-1188, D-0746	Belville Mining Co., Inc.
160	Lucas	Ls-12	IM-953	Barrett Paving Materials, Inc.
161	Mahoning	Mg-629	IM-1008	Blum Mining Co.
162	Mahoning	Mg-EM	IM-1056	E.M.A.I. Corp.
163	Monroe	Me-C	IM-1088	Christman Quarry
164	Monroe	Me-509	IM-1094	Rubel Quarry, Inc.
165	Morgan	Mon-C	IM-1010	Central Ohio Coal Co.
166	Muskingum	Ne-C	D-0820	Central Ohio Coal Co.
167	Noble	Ne-S	IM-913	Sharon Stone Co.
168	Perry	Py-343	IM-1061	Maxville Quarries, Inc.
169	Tuscarawas	Ts-2024	IM-1087	Green Basin Coal, Inc.
170	Tuscarawas	Ts-1982	IM-621	L & M Mineral Co.
171	Mahoning	Mg-631	IM-1103	East Fairfield Coal Co.
173	Adams	Ads-H	IM-805	Holloway Sand & Gravel Co., Inc.
174	Erie	Ee-K	IM-727	Kellstone, Inc.
175	Highland	Hd-D	IM-1170	Dravo Basic Materials Co., Inc.
176	Jefferson, Harrison	Jfn-K	IM-1164	K.C.C.I.

**NUMERICAL INDEX OF OPERATORS OF MINES
SHOWN ON 1994 MINERAL INDUSTRIES MAP OF OHIO, BY COMMODITY – Continued**

LIMESTONE/DOLOMITE – Continued

<i>Map location number</i>	<i>County</i>	<i>State mine number</i>	<i>Division of Reclamation permit number</i>	<i>Name of operator</i>
177	Miami	Mi-BPM	IM-1169	Barrett Paving Materials, Inc.
178	Montgomery	My-Q	IM-860	Quarry Trails
179	Noble	Ne-B	IM-897	B & N Coal, Inc.
180	Ottawa	Oa-18	IM-635	Fox Stone Products, Inc.
181	Tuscarawas	Ts-B	IM-49	Belden Brick Co.
182	Vinton	Vn-193		Quality Stone Co.
183	Wood	Wd-14	IM-1157	Precision Aggregate, Inc.
184	Adams	Ads-BN	IM-1195	Davon, Inc.
185	Muskingum	Mum-907	IM-1200	Pleasant Valley Limestone
186	Muskingum	Mum-SB	IM-1212	Sidwell Bros., Inc.
187	Tuscarawas	Ts-1517	IM-46	Belden Brick Co.
188	Lucas	Ls-13	IM-492	Seaway Sand & Stone, Inc.
189	Guernsey	Gy-326	IM-1244	Red Hill Farm
190	Tuscarawas	Ts-2047	IM-1224	Winfield Clay
191	Tuscarawas	Ts-BB	IM-1221	Belden Brick Co.

SAND AND GRAVEL DREDGING OPERATION △

<i>Map location number</i>	<i>County</i>	<i>State mine number</i>	<i>Division of Reclamation permit number</i>	<i>Name of operator</i>
1		Ee-D		Erie Sand & Gravel Co.
2		Lke-D		Osborne Materials Co.

SAND AND GRAVEL ▲

<i>Map location number</i>	<i>County</i>	<i>State mine number</i>	<i>Division of Reclamation permit number</i>	<i>Name of operator</i>
2	Allen	An-15	IM-721	Ward Materials, Inc.
6	Ashland	Ald-9	IM-0745	Ries Sand & Gravel
8	Ashland	Ald-7	IM-392	Young's Sand & Gravel Co.
9	Ashtabula	Asa-10	IM-198	Frye Sand & Gravel, Inc.
10	Ashtabula	Asa-14	IM-563	Janson's Soil Service, Inc.
14	Ashtabula	Asa-12	IM-1130	Nelson Sand & Gravel, Inc.
15	Ashtabula	Asa-15	IM-783	R. W. Sidley, Inc.
19	Athens	As-588	IM-630	Black Top Contracting, Inc.
21	Athens	As-1161	IM-97	Lake Hope Asphalt, Inc.
23	Auglaize	Ae-23	IM-508	Joseph Sand & Gravel, Inc.
24	Auglaize	Ae-30	IM-598	National Lime & Stone Co.
25	Auglaize	Ae-16	IM-595	Quality Ready Mix, Inc.
26	Belmont	Bt-74	IM-288	Tri-State Asphalt Productions
28	Butler	Br-36	IM-649	V.I.P. Contractors, Inc.
29	Butler	Br-5	IM-153	American Aggregates Corp.
30	Butler	Br-35	IM-200	American Aggregates Corp.
31	Butler	Br-48	IM-562	Broshear Contractors, Inc.
32	Butler	Br-50	IM-739	Dingledine Basic Materials, Inc.
33	Butler	Br-14	IM-147	Dravo Basic Materials Co., Inc.
34	Butler	Br-29	IM-149	Dravo Basic Materials Co., Inc.
37	Butler	Br-40	IM-493	Gaston Bowling, Inc.
38	Butler	Br-52	IM-814	Shamrock Materials, Inc.
39	Butler	Br-15	IM-316	Mecco, Inc.
41	Butler	Br-6	IM-177	Weidle Sand & Gravel, Inc.
42	Butler	Br-3	IM-719	The Gravel Co.

**NUMERICAL INDEX OF OPERATORS OF MINES
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SAND AND GRAVEL — Continued

<i>Map location number</i>	<i>County</i>	<i>State mine number</i>	<i>Division of Reclamation permit number</i>	<i>Name of operator</i>
44	Butler	Br-47	IM-111	Watson Gravel, Inc.
45	Butler	Br-38	IM-218	Welch Sand & Gravel, Inc.
47	Carroll	Cl-204	IM-554	Oneida Sand & Gravel, Inc.
48	Champaign	Cpn-1	IM-371	American Aggregates Corp.
49	Champaign	Cpn-21	IM-616	D & W Sand & Gravel
50	Champaign	Cpn-22	IM-889	Mechanicsburg Sand & Gravel, Inc.
51	Champaign	Cpn-20	IM-482	Moore's Excavating Co.
52	Clark	Ck-13	IM-366	American Aggregates Corp.
54	Clark	Ck-502	IM-375	Demmy Sand & Gravel
57	Clark	Ck-3	IM-463	Hilltop Basic Resources, Inc. (dba Enon Washed Sand & Gravel Co.)
58	Clark	Ck-25	IM-358	Springfield Sand & Gravel Co.
59	Clermont	Ct-9	IM-526	Barrett Paving Materials, Inc.
61	Clermont	Ct-7	IM-432	Kipp's Gravel Co., Inc.
68	Columbiana	Ca-881	IM-611	X L Sand & Gravel
69	Coshocton	Cn-718	IM-227	Apache Aggregate & Paving Co.
70	Coshocton	Cn-783	IM-717	Apache Aggregate & Paving Co.
71	Coshocton	Cn-694	IM-293	Boyd Gravel Co.
72	Coshocton	Cn-624	IM-243	Sugarcreek Clay & Limestone, Inc.
75	Crawford	Cd-3	IM-693	Gibson Sand & Gravel Co.
80	Darke	Dke-4	IM-433	Fouremen's Sand & Gravel, Inc.
81	Darke	Dke-10	IM-326	Tom Hollinger Excavating
82	Defiance	De-2	IM-765	Hillsdale Sand & Gravel, Inc.
83	Erie	Ee-18	IM-676	Erie Materials, Inc.
84	Erie	Ee-29		Jarrett Sand Co.
85	Erie	Ee-5		Keener Sand & Clay Co.
86	Erie	Ee-24	IM-915	Mesenburg Bros., Inc.
91	Fairfield	Fd-12	IM-451	Davis Sand & Gravel
92	Fairfield	Fd-13	IM-848	Lancaster Sand & Gravel Co.
94	Franklin	Fn-36	IM-302	Agg Rok Materials (Division of Wapak Sand & Gravel Co.)
95	Franklin	Fn-6	IM-185	American Aggregates Corp.
96	Franklin	Fn-23	IM-183	American Aggregates Corp.
97	Franklin	Fn-14	IM-832	Big Walnut Sand & Gravel, Inc.
98	Franklin	Fn-52	IM-191	J. P. Sand & Gravel Co.
100	Franklin	Fn-11	IM-234	Mason's Sand & Gravel Co.
101	Franklin	Fn-24	IM-266	S & S Aggregate, Inc.
102	Franklin	Fn-43	IM-188	Olen Corp.
108	Geauga	Gea-29	IM-215	Haueter Sand & Gravel, Inc.
109	Geauga	Gea-35	IM-321	Teague Gravel Co., Inc.
110	Greene	Ge-33	IM-379	American Aggregates Corp.
112	Clark, Greene	Ge-4	IM-394	Hilltop Basic Resources, Inc.
115	Greene	Ge-36	IM-305	Phillips Sand & Gravel
117	Greene	Ge-10	IM-518	Xenia Sand, Gravel, & Asphalt Co.
118	Hamilton	Hmn-37	IM-170	American Aggregates Corp.
119	Hamilton	Hmn-AAC	IM-716	American Aggregates Corp.
120	Hamilton	Hmn-54	IM-710	Ashcraft Sand & Gravel, Inc.
121	Hamilton	Hmn-44	IM-120	Crosby Gravel
123	Hamilton	Hmn-50	IM-205	James Bunnell, Inc.
124	Hamilton	Hmn-59	IM-815	James Bunnell, Inc.
126	Hamilton	Hmn-3	IM-137	Dravo Basic Materials Co., Inc.
127	Hamilton	Hmn-5	IM-148	Dravo Basic Materials Co., Inc.
128	Hamilton	Hmn-11, Hmn-70	IM-133	Dravo Basic Materials Co., Inc.
130	Hamilton	Hmn-64	IM-821	Dravo Basic Materials Co., Inc.
131	Hamilton	Hmn-68	IM-747	Dravo Basic Materials Co., Inc.
132	Hamilton	Hmn-46	IM-396	Eaton Sand & Gravel Co.
134	Hamilton	Hmn-71	IM-771	Southern Ohio Sand & Gravel, Inc., Powell Gravel & Topsoil, Inc.
135	Hamilton	Hmn-17	IM-295	Harrison Sand & Gravel Co.
137	Hamilton	Hmn-67	IM-529	Bertha A. Leonard
139	Hamilton	Hmn-10	IM-226	Rack Sand, Inc.
141	Hamilton	Hmn-28	IM-353	The Gravel Co.
142	Hamilton	Hmn-60	IM-761	Watson Gravel, Inc.
143	Hamilton	Hmn-42	IM-823	Welch Sand & Gravel, Inc.
144	Hamilton	Hmn-48	IM-220	Welch Sand & Gravel, Inc.

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SAND AND GRAVEL – Continued

<i>Map location number</i>	<i>County</i>	<i>State mine number</i>	<i>Division of Reclamation permit number</i>	<i>Name of operator</i>
147	Henry	Hy-5		Gerken Materials, Inc.
151	Hocking	Hg-262	IM-41	Hocking Valley Concrete, Inc.
152	Hocking	Hg-301	IM-458	Muskingum River Gravel Co.
153	Holmes	Hs-82	IM-707	Menuet Bros. Sand & Gravel, Inc.
154	Holmes	Hs-511	IM-1048	Feikert Sand & Gravel, Inc.
157	Huron	Hrn-1	IM-550	Rogers Group, Inc. (dba Norwalk Sand & Gravel)
160	Knox	Kx-7	IM-235	Goodwin Sand & Gravel, Inc.
161	Knox	Kx-16	IM-793	Olen Corp.
162	Knox	Kx-5	IM-884	Mickley Gravel Co.
163	Knox	Kx-3	IM-300	Sant Sand & Gravel, Inc.
165	Knox	Kx-15	IM-967	Small's Sand & Gravel, Inc.
166	Lake	Lke-7	IM-162	R. W. Sidley, Inc.
167	Lawrence	Le-430	IM-844	Becky Lane Trucking, Inc.
170	Lawrence	Le-426	IM-856	Burlington Sand & Gravel Co.
174	Licking	Lg-2	IM-184	American Aggregates Corp.
176	Licking	Lg-31	IM-246	Dry Creek Gravel Co.
177	Licking	Lg-DC	IM-354	Dry Creek Gravel Co.
179	Licking	Lg-10	IM-217	Van Wey Sand & Gravel, Inc.
180	Licking	Lg-15		Walter's Gravel
182	Logan	Lgn-31	IM-454	C. E. Duff & Son, Inc.
183	Logan	Lgn-39	IM-887	C. E. Duff & Son, Inc.
189	Logan	Lgn-6	IM-459	Neer's Sand & Gravel
191	Lorain	Ln-12	IM-731	Guy Schieve
195	Lucas	Ls-13	IM-492	Seaway Sand & Stone, Inc.
196	Mahoning	Mg-632	IM-808	Solomon's Mines, Inc.
197	Marion	Mn-16	IM-171	Scioto Sand & Gravel
198	Marion	Mn-4	IM-290	Penry Stone Co.
200	Marion	Mn-10	IM-196	Union Aggregates Co.
203	Medina	Ma-20	IM-448	Baker Sand, Inc.
206	Medina	Ma-22	IM-425, IM-650, IM-651	Seville Sand & Gravel, Inc.
208	Medina	Ma-16		Silchuk Gravel Co.
209	Meigs	Ms-205	IM-30	Dravo Basic Materials Co., Inc.
211	Meigs	Ms-301	IM-619	Meigs County Commissioners
212	Meigs	Ms-298	IM-32	Richards & Son, Inc.
216	Miami	Mi-6	IM-356	American Aggregates Corp.
217	Miami	Mi-501		New Carlisle Sand & Gravel Co.
219	Miami	Mi-3	IM-462, IM-658	American Aggregates Corp.
220	Miami	Mi-8	IM-355	American Aggregates Corp.
221	Miami	Mi-9	IM-408	Wise Gravel
222	Miami	Mi-4	IM-472	Fenner Sand & Gravel, Inc.
224	Montgomery	My-66	IM-677	American Aggregates Corp.
225	Montgomery	My-65	IM-594	Broadway Sand & Gravel, Inc.
229	Montgomery	My-68	IM-646	H & H Utilities Co.
232	Montgomery	My-19	IM-401, IM-916	Hilltop Basic Resources, Inc.
233	Montgomery	My-52	IM-348	Miller Bros. Gravel, Inc.
236	Montgomery	My-55	IM-571	Jimsco, Inc.
238	Montgomery	My-61	IM-468	Tipp Stone Co., Inc.
239	Montgomery	My-41	IM-360	Weidle Sand & Gravel, Inc.
240	Morgan	Mon-588	IM-35	Chesterhill Stone Co.
241	Morgan	Mon-599		Huck Farms
242	Morrow	Mw-10	IM-258	Chesterville Sand & Gravel Co., Inc.
243	Muskingum	Mum-863	IM-264	Boyd Gravel Co.
244	Muskingum	Mum-799	IM-317	Boyd Gravel Co.
247	Muskingum	Mum-228	IM-421	Muskingum River Gravel Co.
248	Muskingum	Mum-216	IM-689	Salt Creek Materials, Inc.
251	Pickaway	Pky-1	IM-409, IM-428	American Aggregates Corp.
252	Pike	Pke-26	IM-142	Valley Materials Co.
253	Pike	Pke-23	IM-242	Chattin Concrete
254	Pike	Pke-30	IM-786	Gregory Materials Co.
255	Pike	Pke-24	IM-222	Piketon Sand & Gravel
256	Portage	Pe-50	IM-96	Beck Sand & Gravel, Inc.
257	Portage	Pe-15	IM-104	Karl Brugmann Sand & Gravel, Inc.
258	Portage	Pe-9	IM-119	Oscar Brugmann Sand & Gravel, Inc.

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SAND AND GRAVEL – Continued

<i>Map location number</i>	<i>County</i>	<i>State mine number</i>	<i>Division of Reclamation permit number</i>	<i>Name of operator</i>
259	Portage	Pe-17	IM-123	Charlestown Sand & Gravel, Inc.
260	Portage	Pe-84	IM-868	Aurora Sand & Gravel, Inc.
261	Portage	Pe-45	IM-139	R. A. Cruise Sand & Gravel, Inc.
262	Portage	Pe-56	IM-127	Hilltop Aggregate, Inc.
264	Portage	Pe-10	IM-138	Hugo Sand Co.
265	Portage	Pe-63	IM-82	Jefferson Materials Co.
266	Portage	Pe-83	IM-179	Karg Sand & Gravel Co.
268	Portage	Pe-40	IM-190	Lakeside Sand & Gravel Co.
272	Portage	Pe-39	IM-174	Miller Sand & Gravel Co.
273	Portage	Pe-85	IM-700	Northern Ohio Materials, Inc.
274	Portage	Pe-60	IM-78	Schloss Materials Co.
275	Portage	Pe-18	IM-193	Sober Sand & Gravel Co.
276	Portage	Pe-36	IM-90	Solon Excavators Sand & Gravel, Inc.
277	Portage	Pe-68	IM-687, IM-1107	Standard Lafarge
278	Portage	Pe-SS1	IM-660	Standard Lafarge
280	Portage	Pe-64	IM-1017	Rainbow Sand & Gravel, Inc.
281	Portage	Pe-59	IM-210	S & S Aggregate, Inc.
282	Portage	Pe-67	IM-202	S & S Aggregate, Inc.
284	Preble	Pre-7	IM-306	Southern Ohio Aggregates
285	Preble	Pre-4	IM-477	Wysong Gravel Co.
286	Preble	Pre-6	IM-478	Wysong Gravel Co.
287	Richland	Rd-4	IM-279	D. H. Bowman & Sons, Inc.
289	Richland	Rd-18	IM-670	Ganges Gravel
290	Richland	Rd-14	IM-436	John L. Garber Materials, Inc.
297	Ross	Rs-26	IM-922	Elm Spring Farm
303	Scioto	So-98	IM-474	E. E. Blair Construction Co.
304	Scioto	So-83	IM-211	Cunningham Asphalt Paving, Inc.
305	Scioto	So-78		Schilling Contractors, Inc.
306	Scioto	So-79	IM-221	ATS Enterprises
310	Shelby	Shy-12	IM-528	Fleckenstein Farm Gravel Pit
311	Shelby	Shy-17	IM-389	Miami River Stone Co.
312	Shelby	Shy-13	IM-412	Sidney Sand & Gravel Co.
314	Shelby	Shy-11	IM-743	Spring Creek Corp.
315	Shelby	Shy-18	IM-388	Spring Creek Corp.
316	Stark	Sk-N	IM-156	Northern Ohio Paving Co.
318	Stark	Sk-681	IM-164	Canton Aggregate
319	Stark	Sk-689	IM-173	Canton Aggregate
320	Stark	Sk-694	IM-858	A. J. Diana Sons, Inc.
323	Stark	Sk-688	IM-763	Heiser Sand & Gravel Co.
325	Stark	Sk-607	IM-102	Massillon Washed Gravel Co.
326	Stark	Sk-165	IM-192, IM-781	Oster Sand & Gravel, Inc.
327	Summit	St-52	IM-900	Flesher Sand & Gravel, Inc.
328	Summit	St-39	IM-983	Lerkis Asphalt Co., Inc.
330	Summit	St-46	IM-557	H. M. Miller Construction Co.
333	Summit	St-24	IM-239	Riverside Sand & Gravel Co., Inc.
334	Summit	St-9	IM-167	Rubber City Sand & Gravel Co.
335	Summit	St-26	IM-803	Spring Valley Investments, Inc.
336	Summit	St-44	IM-178	S & S Aggregate, Inc.
340	Ashtabula, Trumbull	TL-12	IM-131	Samco, Inc.
343	Tuscarawas	Ts-1826	IM-88	Soehnlen Bros. Sand & Gravel, Inc.
344	Tuscarawas	Ts-1771	IM-77	Spring Industries, Inc.
346	Tuscarawas	Ts-111	IM-55	Stewart & Reichman, Inc.
347	Tuscarawas	Ts-69	IM-51	Stocker Sand & Gravel Co.
348	Tuscarawas	Ts-125	IM-50	Stocker Sand & Gravel Co.
349	Warren	Wan-38	IM-615	American Aggregates Corp.
352	Warren	Wan-41	IM-629	Dravo Basic Materials Co., Inc., Carl E. Oeder & Sons Sand & Gravel
356	Warren	Wan-47	IM-846	C & S Contractors, Inc.
363	Warren	Wan-10	IM-465	Watson Gravel, Inc.
364	Washington	Wn-55	IM-669	Beverly Slag Co.
365	Washington	Wn-508	IM-57	Briggs Sand & Gravel, Inc.
367	Washington	Wn-38	IM-701	Muskingum River Gravel Co.
369	Washington	Wn-510	IM-25	Trout Sand & Gravel Co.

NUMERICAL INDEX OF OPERATORS OF MINES
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SAND AND GRAVEL — Continued

<i>Map location number</i>	<i>County</i>	<i>State mine number</i>	<i>Division of Reclamation permit number</i>	<i>Name of operator</i>
370	Washington	Wn-43	IM-61	M & J Sand & Gravel, Inc.
372	Wayne	We-11	IM-547	Prairie Lane Sand & Gravel Co.
373	Wayne	We-7	IM-471	Rupp Construction, Inc.
374	Wayne	We-15	IM-398	Zollinger Sand & Gravel Co.
375	Williams	Ws-6	IM-497	Stoneco, Inc.
376	Williams	Ws-9	IM-498	Stoneco, Inc.
377	Defiance, Williams	Ws-11	IM-509, IM-661	Weber Sand & Gravel, Inc.
378	Williams	Ws-14	IM-614	Dennis Winzeler
379	Wyandot	Wt-4	IM-520	Precision Aggregate, Inc.
380	Wyandot	Wt-15	IM-376	National Lime & Stone Co.
381	Wyandot	Wt-18	IM-551	National Lime & Stone Co.
382	Wyandot	Wt-17	IM-604	Kirby's Sand & Gravel, Inc.
384	Summit	St-53	IM-874	Portage Lakes Sand & Gravel Co.
385	Clark	Ck-501	IM-340	Demmy Construction, Inc.
386	Stark	Sk-203	IM-654	American Sand & Gravel
387	Portage	Pe-ASG	IM-212	American Sand & Gravel
388	Lawrence	Le-445	IM-928	D & D Sand Bank
389	Tuscarawas	Ts-1976	IM-941, IM-942	Benco Leasing, Inc.
390	Miami	Mi-T	IM-696	Lloyd Fry
395	Scioto	So-100	IM-950	Scioto Valley Resources
401	Fairfield	Fd-14	IM-933	Paul D. Beery Trucking Co.
403	Greene	Ge-40	IM-923	Donald Martin Contracting
404	Greene	Ge-42	IM-954	American Aggregates Corp.
405	Greene	Ge-32	IM-400	American Aggregates Corp.
407	Hamilton	Hmn-69	IM-969	American Aggregates Corp.
408	Knox	Kx-17	IM-968	Small's Sand & Gravel, Inc.
409	Richland	Rd-20	IM-617	Bolin & Bartley, Inc.
410	Muskingum	Mum-267	IM-914	Luburgh, Inc.
412	Ashland	Ald-15	IM-944	Young's Sand & Gravel Co.
413	Ashtabula	Asa-18	IM-949	Simak Trucking, Inc.
415	Geauga	Gea-9	IM-132	Soltis Sand & Gravel
416	Holmes	Hs-96	IM-997	Jeff Chaney
417	Huron	Hrn-16	IM-975	Erie Blacktop, Inc.
419	Licking	Lg-504	IM-991	Gary Roberts Excavating
420	Logan	Lgn-36	IM-1007	C. E. Duff & Son, Inc.
423	Marion	Mn-19	IM-990	Fleming Construction Co., Inc.
424	Monroe	Me-508	IM-1000	B & D Paving Co.
427	Summit	St-54	IM-934	R & S, Inc.
428	Tuscarawas	Ts-2001	IM-1004	Newton Asphalt
429	Warren	Wan-46	IM-679, IM-842	Paul N. Herdman
430	Warren	Wan-50	IM-1006	L & I Natural Resources, Inc.
432	Washington	Wn-54	IM-383	Atlas Towing Co.
435	Stark	Sk-173	IM-879	Allied Corp., Inc.
437	Clark	Ck-7	IM-449	City of Springfield
438	Coshocton	Cn-828	IM-1026	William Albert, Inc.
440	Gallia	Ga-626	IM-1046	Cremeans Concrete & Supply
441	Greene	Ge-38	IM-333	Watson Gravel, Inc.
442	Geauga	Gea-39	IM-1104	B-M Machine Co.
443	Geauga	Gea-40	IM-977	Solon Excavators Sand & Gravel, Inc.
444	Logan	Lgn-12	IM-1193	C. E. Duff & Son, Inc.
446	Miami	Mi-12	IM-467	Tipp Stone Co., Inc.
447	Miami	Mi-504	IM-1032	Stillwater Sand & Gravel, Inc.
448	Muskingum	Mum-262	IM-422	Muskingum River Gravel Co.
449	Muskingum	Mum-899		Boyd Gravel Co.
451	Portage	Pe-89	IM-1142	Green Oaks Potting Products
452	Ross	Rs-M	IM-114	Muskingum River Gravel Co.
453	Stark	Sk-241	IM-582	Standard Lafarge
455	Stark	Sk-243	IM-908	American Sand & Gravel
456	Wood	Wd-13	IM-998	G. M. Sader Excavating & Paving, Inc.
458	Athens	As-595	IM-1083	Cochran Transportation Services, Inc.
459	Athens	As-W	IM-979	Olen Corp.
460	Butler	Br-S	IM-1053	Southern Ohio Aggregates, Inc.
461	Clark	Ck-28	IM-1100	Barrett Paving Materials, Inc.

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SAND AND GRAVEL — Continued

<i>Map location number</i>	<i>County</i>	<i>State mine number</i>	<i>Division of Reclamation permit number</i>	<i>Name of operator</i>
463	Columbiana	Ca-982	IM-1108	Leetonia Sand & Gravel Co., Inc.
464	Columbiana	Ca-U	IM-999	United Builders Distributing Corp.
465	Franklin	Fn-58	IM-1023	Olen Corp.
466	Gallia	Ga-O	IM-1028	Ours Sand & Gravel
467	Hamilton	Hmn-AS	IM-1106	Allgeier & Son, Inc.
468	Hamilton	Hmn-D	IM-1079	Dravo Basic Materials Co., Inc.
469	Hardin	Hdn-C	IM-1081	Crates Excavating
470	Holmes	Hs-J	IM-1043	Jones Sand & Gravel Co.
472	Lucas	Ls-G	IM-1090	H. T. Griffin Excavating, Inc.
474	Madison	Mdn-11	IM-1063	Tuffco Sand & Gravel, Inc.
475	Mahoning	Mg-630	IM-1091	Wallace Rd. Sand & Gravel
476	Mahoning	Mg-629	IM-1008	Blum Mining Co.
480	Pickaway	Pky-H	IM-1039	William A. Hoffman, Jr.
481	Pickaway	Pky-R	IM-993	Richards Farms, Inc., Melvin Stone Co.
482	Portage	Pe-61	IM-1064	Red Brush Peat Co.
483	Portage	Pe-92	IM-522	Don Wartko Construction, Inc.
486	Portage	Pe-SE	IM-1096	Solon Excavators Sand & Gravel, Inc.
487	Portage	Pe-SS2	IM-1047	Standard Lafarge
488	Preble	Pre-9	IM-1095	Loxley Aggregates, Inc.
489	Richland	Rd-L	IM-1086	Carroll Lifer Excavating, Inc.
490	Ross	Rs-27	IM-1098	Chillicothe Sand & Gravel Co.
491	Ross	Rs-H	IM-1052	Haubeil & Sons Asphalt & Materials, Inc.
493	Shelby	Shy-S	IM-1005	Sidney Sand & Gravel Co.
494	Shelby	Shy-SC	IM-1018	Spring Creek Gravel Co., Inc.
495	Stark	Sk-M	IM-1031	Massillon Materials, Inc.
499	Trumbull	Tl-K	IM-1101	Kleese Development Associates, Inc.
500	Tuscarawas	Ts-2018	IM-1076	Zink Petroleum Corp. (dba State Rte. 416 Sand & Gravel), Northern Ohio Materials, Inc.
501	Warren	Wan-M	IM-728, IM-1065	Morrow Gravel Co.
502	Warren	Wan-M1	IM-1051	Morrow Gravel Co.
503	Warren	Wan-M2	IM-837	Morrow Gravel Co.
504	Washington	Wn-1007	IM-1042	Mark Williams Blacktop Co., Inc.
506	Williams	Ws-T	IM-1022	Stoneco, Inc.
507	Gallia	Ga-507	IM-1074	Cedar Heights Clay Co.
508	Ashland	Ald-G	IM-1121	David B. Good
509	Ashland	Ald-16	IM-1120	Bolin & Bartley, Inc.
510	Ashtabula	Asa-N	IM-1109	Nelson Sand & Gravel, Inc.
512	Carroll	Cl-N	IM-641	National Aggregates, Inc.
516	Delaware	Del-S	IM-1118	Michael B. Sayers
517	Geauga	Gea-N	IM-1123	Newbury Sand & Gravel
518	Geauga	Gea-TK	IM-902	T & K Kuhnle Co.
519	Hamilton	Hmn-B	IM-1139	James Bunnell, Inc.
520	Hamilton	Hmn-C	IM-1132	Nelson Transfer, Inc.
521	Hamilton	Hmn-AS1	IM-797	Allgeier & Son, Inc.
523	Hocking	Hg-329	IM-1112	Kilbarger Construction, Inc.
526	Logan	Lgn-M	IM-799	Miller Bros. Construction, Inc.
528	Portage	Pe-SSC	IM-318	Sunshine Sand Co.
529	Portage	Pe-96	IM-792	Don's Dozer Service, Inc.
530	Ross	Rs-R	IM-1143	Ross County Gravel Co.
531	Tuscarawas	Ts-2030	IM-1125	Larkin Sewer Contractors, Inc.
532	Tuscarawas	Ts-2029	IM-1129	Burrgett Industries, Inc.
533	Washington	Wn-1008	IM-1111	Grimes Excavating
534	Washington	Wn-1009	IM-525	Mark Williams Blacktop Co., Inc.
535	Wayne	We-23	IM-1136	Buckeye Excavating
536	Champaign	Cpn-24	IM-1167	Bill McKeever Excavating
537	Clermont	Ct-11	IM-665	John E. Jones Construction Co.
538	Columbiana	Ca-993	IM-1180	Willowbrook
539	Columbiana	Ca-351	IM-634	Hutson Road Mining Co.
540	Coshocton	Cn-A	IM-971	Addy Sand & Gravel Co.
541	Fairfield	Fd-16	IM-1156	James E. Downard
542	Fulton	Ftn-S	IM-1146	Sandman Sand & Stone, Inc.
543	Fulton	Ftn-6	IM-1175	Tommie G. Walters
544	Gallia	Ga-J	IM-1145	Jaymar, Inc.

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SAND AND GRAVEL — Continued

<i>Map location number</i>	<i>County</i>	<i>State mine number</i>	<i>Division of Reclamation permit number</i>	<i>Name of operator</i>
545	Geauga	Gea-H	IM-510	Haueter Sand & Gravel, Inc.
546	Greene	Ge-46	IM-1149	Don Thompson Excavating, Inc.
547	Greene	Ge-R	IM-829	Richards Service Garage
548	Greene	Ge-47	IM-751	M. J. Coates Construction Co.
549	Greene	Ge-W	IM-645	Hoyle Weddle
550	Greene	Ge-G	IM-655	James D. Graham
551	Hamilton	Hmn-S	IM-746	Southern Ohio Aggregates, Inc.
552	Hamilton	Hmn-SO	IM-720	Southern Ohio Aggregates, Inc.
553	Hardin	Hdn-H	IM-864	Norman Harpster
554	Jefferson	Jfn-PE	IM-1162	Penn Eagle Coal Corp.
555	Knox	Kx-OC	IM-930	Olen Corp.
556	Lucas	Ls-MH	IM-1144	Sandman Sand & Stone, Inc.
557	Lucas	Ls-F	IM-1160	Craig Fankhauser
558	Medina	Ma-23	IM-1177	Friendsville Sand, L.P.
559	Meigs	Ms-L	IM-1159	Letart Corp.
560	Meigs	Ms-308	IM-1174	Letart Corp.
561	Montgomery	My-CW	IM-878	Carter & Carter, Inc.
562	Montgomery	My-R	IM-539	John P. Raisch, Inc.
563	Morgan	Mon-CSC	IM-1178	Chesterhill Stone Co.
564	Pickaway	Pky-D	IM-1150	Darby Gravel Co.
565	Pickaway	Pky-W	IM-1176	Gene T. Wilson
568	Portage	Pe-101	IM-1154	D & K Materials, Inc.
569	Portage	Pe-SP	IM-499	Schloss Materials Co.
570	Portage	Pe-L	IM-154	Lucky Sand & Gravel Co.
571	Preble	Pre-AAC	IM-779	American Aggregates Corp.
573	Ross	Rs-E	IM-1168	David E. Edington
574	Ross	Rs-RC	IM-925	Ross County Redi-Mix Co., Inc.
576	Scioto	So-B	IM-705	Boone Coleman
577	Shelby	Shy-SS	IM-438	Sidney Sand & Gravel Co.
578	Stark	Sk-MW	IM-1171	Massillon Washed Gravel Co.
579	Stark	Sk-W	IM-867	Ralph C. Wagner & Sons
581	Stark	Sk-R	IM-697	Rupp Construction, Inc.
582	Stark	Sk-SI	IM-588	Spring Industries, Inc.
583	Summit	St-50	IM-722	A-1 All Ohio Sand & Gravel Co.
584	Trumbull	Tl-16	IM-1158	Nick's Trucking
586	Tuscarawas	Ts-2036	IM-1155	Oster Sand & Gravel, Inc.
587	Tuscarawas	Ts-2049	IM-1151	Al Gasser Excavating, Inc.
588	Tuscarawas	Ts-SI	IM-569	Spring Industries, Inc.
589	Warren	Wan-7	IM-151	Embro, Inc.
590	Washington	Wn-1010	IM-1163	M & J Sand & Gravel, Inc.
591	Wyandot	Wt-K	IM-943	Kirby Sand & Gravel, Inc.
592	Ashtabula	Asa-22	IM-1214	Easton Resources, Inc.
593	Ashtabula	Asa-K	IM-1198	Kinsman Sand & Gravel Co.
594	Coshocton	Cn-SQ	IM-1185	Stonehill Quarry, Inc.
595	Cuyahoga	Cya-42	IM-686	Boyas Excavating, Inc.
596	Hocking	Hg-G	IM-1201	Good Builders
597	Lake	Lke-C	IM-1215	Cashen, Inc.
598	Lake	Lke-D	IM-1187	DeMilta Sand & Gravel, Inc.
600	Licking	Lg-W	IM-1213	Geiger Sand & Gravel
601	Lucas	Ls-H	IM-1217	Hidden Harbour Partners
602	Mahoning	Mg-631	IM-1103	East Fairfield Coal Co.
603	Pickaway	Pky-AAC	IM-1204	Melvin Stone Co.
604	Pickaway	Pky-R1	IM-992	Richards Farms, Inc.
605	Portage	Pe-102	IM-1184	Brimfield Sand & Gravel
606	Ross	Rs-T	IM-1189	Tackett Builders
607	Stark	Sk-BE	IM-1202	Beaver Excavating, Inc.
608	Stark	Sk-HS	IM-1193	Heiser Sand & Gravel Co.
609	Stark	Sk-HS1	IM-1203	Heiser Sand & Gravel Co.
610	Stark	Sk-1017	IM-1186	National Aggregates, Inc.
611	Trumbull	Tl-C	IM-1190	Center West Enterprise, Inc.
612	Tuscarawas	Ts-A	IM-1218	Acme Sand & Gravel
613	Wayne	We-24	IM-1211	E. A. Construction, Inc.

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SAND AND GRAVEL – Continued

<i>Map location number</i>	<i>County</i>	<i>State mine number</i>	<i>Division of Reclamation permit number</i>	<i>Name of operator</i>
614	Williams	Ws-20		Gerken Materials, Inc.
615	Portage	Pe-98	IM-1219	Johnson Rd. Sand & Gravel
616	Ashland	Ald-Y	IM-1216	Young's Sand & Gravel Co.
617	Ashtabula	Asa-21	IM-1239	Sunrise Sand & Gravel
618	Ashtabula	Asa-23	IM-1237	Easton Excavating, Inc.
619	Champaign	Cpn-25	IM-1227	T. K. Stone Co., Inc.
620	Clark	Ck-29	IM-1233	Moore's Excavating Co.
621	Coshocton	Cn-B	IM-1238	BRYCO
622	Fulton	Ftn-M	IM-1246	Al Mackey Enterprise, Inc.
623	Geauga	Gea-43	IM-1230	Solon Excavators Sand & Gravel, Inc.
624	Holmes	Hs-F	IM-1240	Feikert Sand & Gravel, Inc.
625	Lake	Lke-CIR	IM-1243	C.I.R., Inc.
626	Muskingum	Mum-J	IM-1229	Glen James & Sons, Inc.
627	Pickaway	Pky-C	IM-1223	Valley Gravel
628	Portage	Pe-OB	IM-1241	Oscar Brugmann Sand & Gravel, Inc.
629	Richland	Rd-K	IM-1232	Leonard E. Kleilein
630	Scioto	So-TTK	IM-1250	T. T. & K. Construction, Inc.
631	Stark	Sk-CA	IM-1234	Canton Aggregate
632	Wayne	We-27	IM-1242	Valley Gravel Co.
633	Williams	Ws-21	IM-1225	Thiel Construction Co.
634	Williams	Ws-22	IM-1222	Heer Excavating, Inc.

SANDSTONE/CONGLOMERATE ▼

<i>Map location number</i>	<i>County</i>	<i>State mine number</i>	<i>Division of Reclamation permit number</i>	<i>Name of operator</i>
1	Carroll	Cl-102	IM-278	Conotton Valley Quarries Co.
4	Coshocton	Cn-13	IM-397	Briar Hill Stone Co.
5	Coshocton	Cn-659	IM-232	Briar Hill Stone Co.
6	Coshocton	Cn-686	IM-504	Briar Hill Stone Co.
7	Coshocton	Cn-692	IM-294	Briar Hill Stone Co.
8	Coshocton	Cn-695	IM-402	Briar Hill Stone Co.
13	Cuyahoga	Cya-42	IM-686	Boyas Excavating, Inc.
14	Erie	Ee-21	IM-416	Cleveland Quarries, L.P.
17	Geauga	Gea-3	IM-89	Best Sand Corp.
18	Geauga	Gea-1	IM-163	R. W. Sidley, Inc.
19	Holmes	Hs-49	IM-418	Briar Hill Stone Co.
20	Huron	Hrn-8	IM-268	Mesenburg Bros., Inc.
23	Knox	Kx-12	IM-445	Briar Hill Stone Co.
24	Knox	Kx-1	IM-269	Oglebay Norton Industrial Sands, Inc.
27	Lorain	Ln-3	IM-415	Cleveland Quarries, L.P.
30	Mahoning	Mg-62	IM-599	Gwin Contracting Co.
34	Ross	Rs-16	IM-172	Southern Silica, Inc.
36	Scioto	So-48	IM-140	Waller Bros. Stone Co.
37	Scioto	So-76	IM-141	Waller Bros. Stone Co.
38	Scioto	So-82	IM-158	Waller Bros. Stone Co.
40	Trumbull	Tl-13	IM-777	Sidwell Bros., Inc.
41	Tuscarawas	Ts-1818	IM-9	Kimble Clay & Limestone Co.
42	Tuscarawas	Ts-1660	IM-68	U.S. Silica Co.
43	Washington	Wn-45	IM-125	Alan Stone Co., Inc.
44	Coshocton	Cn-815	IM-939	Briar Hill Stone Co.
45	Pike	Pke-31	IM-835	Schrader Sand & Gravel, Best Sand Corp.
46	Coshocton	Cn-809	IM-909	Briar Hill Stone Co.
47	Columbiana	Ca-970	IM-1024	M & M Builders Supply Co.
48	Perry	Py-344	IM-1014	Oglebay Norton Industrial Sands, Inc.
49	Summit	St-24	IM-239	Riverside Sand & Gravel Co., Inc.
50	Geauga	Gea-N	IM-1123	Newbury Sand & Gravel
51	Belmont	Bt-1193	IM-1117	Alan Stone Co., Inc.
53	Mahoning	Mg-631	IM-1103	East Fairfield Coal Co.
54	Tuscarawas	Ts-2032	IM-1141	Slankard Dozer Service, Inc.
55	Tuscarawas	Ts-1982	IM-621	L & M Mineral Co.

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<i>Map location number</i>	<i>County</i>	<i>State mine number</i>	<i>Division of Reclamation permit number</i>	<i>Name of operator</i>
56	Belmont	Bt-1190	IM-1089	Frank Widmor Coal Co., Inc.
57	Columbiana	Ca-888	IM-1181	D. & D. Mining Co.
58	Geauga	Gea-S	IM-161	R. W. Sidley, Inc.
59	Jefferson	Jfn-PE	IM-1162	Penn Eagle Coal Corp.
60	Lake	Lke-K	IM-859	Keeney Sand & Stone, Inc.
61	Perry	Py-K	IM-851	Kieco Sand & Shale
62	Tuscarawas	Ts-1517	IM-46	Belden Brick Co.
63	Tuscarawas	Ts-2024	IM-1087	Green Basin Coal, Inc.
64	Wayne	We-26	IM-690, IM-1210	Rash Energy, Inc.
65	Columbiana	Ca-982	IM-1108	Leetonia Sand & Gravel Co., Inc.
66	Lorain	Ln-14	IM-1205	Golden Crescent Construction, Inc.
67	Perry	Py-DCC	IM-1192	Dennis Clay Co.
68	Summit	St-60	IM-12	Ohio Bulk Transfer Co.
70	Portage	Pe-9	IM-119	Oscar Brugmann Sand & Gravel, Inc.
71	Tuscarawas	Ts-1841	IM-45	Belden Brick Co.

CLAY/SHALE □

<i>Map location number</i>	<i>County</i>	<i>State mine number</i>	<i>Division of Reclamation permit number</i>	<i>Name of operator</i>
1	Ashland	Ald-1	IM-334	London Tile Co.
2	Auglaize	Ae-7		Sandkuhl Clay Works, Inc.
4	Columbiana	Ca-505	IM-13, IM-936	State Line Resources, Inc.
5	Columbiana	Ca-205	IM-74	Summitville Tiles, Inc.
6	Coshocton	Cn-787	IM-610	General Clay Products Corp.
7	Cuyahoga	Cya-19	IM-95	Hydraulic Press Brick Co.
10	Greene	Ge-8	IM-364	Southwestern Portland Cement Co.
11	Harrison	Hn-152	IM-42	Bowerston Shale Co.
12	Hocking	Hg-205	IM-21	General Clay Products Corp.
17	Holmes	Hs-56		Clark Clay Co.
18	Holmes	Hs-77	IM-545	General Clay Products Corp.
19	Holmes	Hs-67	IM-3, IM-768	Holmes Limestone Co.
21	Jackson	Jkn-1001	IM-19, IM-336	Cedar Heights Clay Co.
22	Jackson	Jkn-1007	IM-24	Cedar Heights Clay Co.
23	Jackson	Jkn-367	IM-774, D-0273, D-0286, D-0594	Waterloo Coal Co., Inc.
24	Lawrence	Le-440	IM-828, IM-902	American Olean Tile Co., Inc.
31	Licking	Lg-501	IM-257	Bowerston Shale Co.
34	Mahoning	Mg-608	IM-4	E.M.A.I. Corp. (dba ESSROC Materials, Inc.)
36	Marion	Mn-7	IM-309	Glen-Gery Corp.
37	Medina	Ma-6	IM-455	General Clay Products Corp.
38	Muskingum	Mum-776	IM-256	Bowerston Shale Co.
41	Noble	Ne-66	IM-664	Towne Square Products
42	Paulding	Pg-1	IM-513	Lafarge Corp.
46	Perry	Py-212	IM-58	Ludowici-Celadon Co.
56	Tuscarawas	Ts-1517	IM-46	Belden Brick Co.
57	Tuscarawas	Ts-1646	IM-44	Belden Brick Co.
58	Tuscarawas	Ts-1841	IM-45	Belden Brick Co.
59	Tuscarawas	Ts-1939	IM-47	Belden Brick Co.
60	Tuscarawas	Ts-1960	IM-48	Belden Brick Co.
63	Tuscarawas	Ts-1818	IM-9	Kimble Clay & Limestone Co.
64	Tuscarawas	Ts-1884	IM-6	L & M Mineral Co.
65	Tuscarawas	Ts-1914	D-0701	L & M Mineral Co.
67	Tuscarawas	Ts-1557, Ts-1558	IM-52	Stone Creek Brick Co.
71	Tuscarawas	Ts-540	IM-28	Zoar Mining Co.
73	Wyandot	Wt-7	IM-407	General Clay Products Corp.
76	Stark	Sk-235	IM-945	Holmes Limestone Co.

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<i>Map location number</i>	<i>County</i>	<i>State mine number</i>	<i>Division of Reclamation permit number</i>	<i>Name of operator</i>
77	Columbiana	Ts-1982	IM-621	L & M Mineral Co.
79	Athens	Ca-947	IM-935	Dome Minerals, Inc.
81	Stark	As-594		Athens Hocking Reclamation Center
82	Ashtabula	Asa-14	IM-563	Janson's Soil Service, Inc.
85	Tuscarawas	Ts-520	IM-214	Blue Jay Enterprises, Inc.
86	Geauga	Gea-9	IM-132	Soltis Sand & Gravel
87	Athens	As-595	IM-1083	Cochran Transportation Services, Inc.
88	Coshocton	Cn-828	IM-1026	William Albert, Inc.
89	Erie	Ee-32	IM-1077	Speer Brothers, Inc.
90	Greene	Ge-44		Southwestern Portland Cement Co.
91	Jackson	Jkn-CH	IM-1060	Cedar Heights Clay Co.
92	Lake	Lke-M	IM-1059	Mitchell Transport, Inc.
93	Lawrence	Le-B	IM-1072	Belville Mining Co., Inc.
98	Perry	Py-N	IM-1097	Nutter Bros. Coal Co., Inc.
99	Pike	Pke-26	IM-142	Valley Materials Co.
101	Preble	Pre-9	IM-1095	Loxley Aggregates, Inc.
102	Stark	Sk-HC	IM-1037	Hillcrest Coal, Ltd.
103	Tuscarawas	Ts-2024	IM-1087	Green Basin Coal, Inc.
104	Wood	Wd-13	IM-998	G. M. Sader Excavating & Paving, Inc.
105	Belmont	Bt-1190	IM-1089	Frank Widmor Coal Co., Inc.
106	Columbiana	Ca-970	IM-1024	M & M Builders Supply Co.
107	Mahoning	Mg-EM	IM-1056	E.M.A.I. Corp. (dba ESSROC Materials, Inc.)
108	Perry	Py-338	IM-1092	Dennis Clay Co.
109	Harrison	Hn-B	IM-1020	Bowerston Shale Co.
110	Hocking	Hg-330	IM-1013	General Clay Products Corp.
111	Holmes	Hs-96	IM-997	Jeff Chaney
114	Richland	Rd-R	IM-1035	Richland Moulded Brick Co.
116	Portage	Pe-61	IM-1064	Red Brush Peat Co.
118	Mahoning	Mg-631	IM-1103	East Fairfield Coal Co.
120	Butler	Br-56	IM-1137	S. K. Construction Co.
122	Muskingum	Mum-904	IM-1127	Valley Clay Mining Co.
123	Stark	Sk-246	IM-1114	American Landfill, Inc.
124	Muskingum	Mum-903	IM-1115	Dennis Clay Co.
126	Stark	Sk-217	IM-750	Waste Management of Ohio, Inc.
127	Columbiana	Ca-989	IM-1110	Summitville Tiles, Inc.
128	Athens	As-533	IM-17	R. A. Eberts Co., Inc.
130	Columbiana	Ca-348	IM-976	D. & D. Mining Co.
131	Columbiana	Ca-DM	IM-919	David McCourt Mining Co.
133	Jefferson	Jfn-PE	IM-1162	Penn Eagle Coal Corp.
134	Lawrence	Le-T	IM-1172	Tri-State Clay & Coal Co., Inc.
135	Mahoning	Mg-632	IM-808	Solomon's Mines, Inc.
136	Ottawa	Oa-19	IM-1153	Brush Wellman, Inc.
137	Perry	Pg-344	IM-1014	Oglebay Norton Industrial Sands, Inc.
138	Perry	Py-S1	IM-1183	Swingle Drilling, Inc.
139	Pickaway	Pke-D	IM-1150	Darby Gravel Co.
142	Tuscarawas	Ts-MMO	IM-1166	Miller Mining, Inc.
143	Wayne	Hs-79	IM-656	Holmes Limestone Co.
144	Wayne	We-26	IM-690, IM-1210	Rash Energy, Inc.
145	Jackson	Jkn-CH1	IM-1182	Cedar Heights Clay Co.
146	Stark	Sk-247	D-0929	Buckeye-Industrial Mining Co.
147	Tuscarawas	Ts-B	IM-49	Belden Brick Co.
148	Knox	Kx-K	IM-870	Board of Knox County Commissioners
149	Perry	Py-K	IM-851	Kieco Sand & Shale
150	Ross	Rs-T	IM-1189	Tackett Builders
151	Tuscarawas	Ts-H1	IM-927	L & M Mineral Co.
152	Washington	Wn-1010	IM-1163	M & J Sand & Gravel, Inc.
153	Champaign	Cpn-20	IM-482	Moore's Excavating Co.
154	Coshocton	Cn-JTM	IM-1199	JTM Industries, Inc.
155	Fairfield	Fd-16	IM-1156	James E. Downard
156	Lucas	Ls-13	IM-492	Seaway Sand & Stone, Inc.
157	Montgomery	My-CW	IM-878	Carter & Carter, Inc.
158	Montgomery	My-W	IM-1207	Weidle Sand & Gravel, Inc.
159	Perry	Py-DCC	IM-1192	Dennis Clay Co.

**NUMERICAL INDEX OF OPERATORS OF MINES
SHOWN ON 1994 MINERAL INDUSTRIES MAP OF OHIO, BY COMMODITY — Continued**

CLAY/SHALE — Continued

<i>Map location number</i>	<i>County</i>	<i>State mine number</i>	<i>Division of Reclamation permit number</i>	<i>Name of operator</i>
160	Pike	Pke-J	IM-1194	John James Estes & Assoc., Inc.
161	Portage	Pe-89	IM-1142	Green Oaks Potting Products, Inc.
162	Stark	Sk-BE	IM-1202	Beaver Excavating, Inc.
163	Washington	Wn-F	IM-1208	David L. Florence
164	Columbiana	Ca-888	IM-1181	D. & D. Mining Co.
165	Wayne	We-25	IM-1209	Craigton Shale Co.
166	Ashtabula	Asa-18	IM-949	Simak Trucking, Inc.
167	Carroll	Cl-238	D-0703	Buckeye-Industrial Mining Co.
168	Coshocton	Cn-B	IM-1238	BRYCO
169	Coshocton	Cn-OHM	IM-1247	OHM Remediation Services Corp.
170	Fulton	Ftn-A	IM-1249	Andre Land Forming
171	Hocking	Hg-G	IM-1201	Good Builders
172	Licking	Lg-N	IM-1248	NuWay Services, Inc.
173	Perry	Py-V	IM-1245	Valley Clay Mining Co.
174	Stark	Sk-K	IM-1236	Koch Engineering Co., Inc.
175	Tuscarawas	Ts-2047	IM-1224	Winfield Clay
176	Muskingum	Mum-DCC	IM-1220	Dennis Clay Co.
177	Tuscarawas	Ts-BB	IM-1221	Belden Brick Co.
178	Columbiana	Ca-987	D-0928	Buckeye-Industrial Mining Co.
179	Wayne	We-11	IM-547	Prairie Land Sand & Gravel Co.

SALT ■ ■

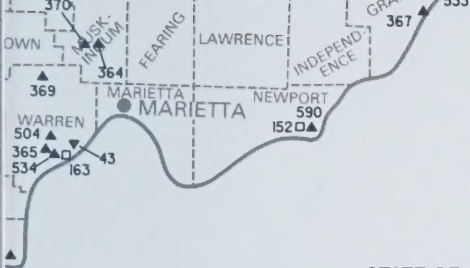
<i>Map location number</i>	<i>County</i>	<i>State mine number</i>	<i>Division of Reclamation permit number</i>	<i>Name of operator</i>
1	Cuyahoga	Cya-30		Akzo Nobel Salt, Inc.
2	Lake	Lke-6		Morton International, Inc.
3	Licking	Lg-45		R. H. Penick Co.
4	Summit	St-9127		Akzo Nobel Salt, Inc.
5	Wayne	We-9129		Morton International, Inc.

GYPSUM ◆

<i>Map location number</i>	<i>County</i>	<i>State mine number</i>	<i>Division of Reclamation permit number</i>	<i>Name of operator</i>
1	Ottawa	Oa-2	IM-344	Celotex Corp.

PEAT ◇

<i>Map location number</i>	<i>County</i>	<i>State mine number</i>	<i>Division of Reclamation permit number</i>	<i>Name of operator</i>
1	Ashland	Ald-13		Mohican Organic Products, Inc.
2	Champaign	Cpn-9		Sphagnum Moss Peat Farm
4	Williams	Ws-17		Lingvai Peat Co.
7	Portage	Pe-89	IM-1142	Green Oaks Potting Products, Inc.
9	Portage	Pe-61	IM-1064	Red Brush Peat Co.



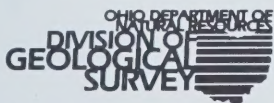
STATE OF OHIO
George V. Voinovich, Governor
DEPARTMENT OF NATURAL RESOURCES
Donald C. Anderson, Director
DIVISION OF GEOLOGICAL SURVEY
Thomas M. Berg, Chief

MINERAL INDUSTRIES MAP OF OHIO

1994

COMPILED BY
SHERRY L. WEISGARBER

This map is based on operators listed in the 1994 *Report on Ohio mineral industries* and is intended for general reference. Assistance with locations was received from the Ohio Department of Natural Resources, Division of Reclamation.



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- MINES, QUARRIES, AND PREP PLANTS
- Coal, underground
 - Coal, strip
 - Coal, prep plant
 - Gypsum
 - Limestone/dolomite
 - Peat
 - Salt, brine
 - Salt, rock
 - Sand and gravel
 - Sand and gravel dredging operation
 - Sandstone/conglomerate
 - Shale/clay

Locations are approximate. Numbers opposite symbols are map-location numbers assigned to operators listed in the alphabetical directories of the Division of Geological Survey's *Report on Ohio mineral industries*. The operator of a mine or quarry may be determined from the directories by use of the map-location commodity symbol, number, and county name. A list of operators by commodity and map-location number is also provided.

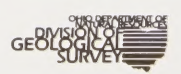
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CARTOGRAPHER: MICHAEL R. LESTER

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